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THESIS

ENABLING SYSTEM MANAGEMENT THROUGH PROCESS MODELING:
THE AUSTRALIAN DEFENCE FORCE RECRUITING SYSTEM

by

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September 2006

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13. ABSTRACT (maximum 200 words)

Defence Force Recruiting (DFR) is responsible for all ab initio recruitment of full-time and part-time Officer Appointees and General Entry Enlistees into the Australian Defence Force (ADF) to serve in the Australian Army, Navy or Air Force. Despite the merging of single-service selection systems into a tri-service system and the commercialization of significant components of ADF recruitment functions in 2001, recruiting achievement continues to be below the targeted levels essential to maintain the ADF personnel strength necessary for operations. An assessment of the Recruiting System to enable managerial overview and performance evaluation is warranted. Using avant-garde commercial-of-the-shelf (COTS) process modeling software a Recruiting System Model (RSM) will be built that captures the entire Recruiting System in three dimensions. This will become a tool for Defence and DFR managers at all levels that will enrich their ability to assess, analyze, and improve the Recruiting System. Ultimately it will help identify the components of the Recruiting System that are functioning in a manner detrimental to achieving ADF recruiting goals.

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**ENABLING SYSTEM MANAGEMENT THROUGH PROCESS MODELING:
THE AUSTRALIAN DEFENCE FORCE RECRUITING SYSTEM**

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ABSTRACT

Defence Force Recruiting (DFR) is responsible for all ab initio recruitment of full-time and part-time Officer appointees and general entry enlistees into the Australian Defence Force (ADF) to serve in the Australian Army, Navy or Air Force. Despite the merging of single-service selection systems into a tri-service system and the commercialization of significant components of ADF recruitment functions in 2001, recruiting achievement continues to be below the targeted levels essential to maintain the ADF personnel strength necessary for operations. An assessment of the recruiting system to enable managerial overview and performance evaluation is warranted.

Using avant-garde commercial-of-the-shelf (COTS) process modeling software a Recruiting System Model (RSM) will be built that captures the entire recruiting system in three dimensions. This will become a tool for Defence and DFR managers at all levels that will enrich their ability to assess, analyze, and improve the recruiting system. Ultimately it will help identify the components of the Recruiting System that are functioning in a manner detrimental to achieving ADF recruiting goals and provide the means to predict the effects on recruiting achievement of multiple courses of actions. The RSM incorporates a visual graphical depiction of the ADF recruiting system as well as numerical throughput rates and yield ratios for the processes and sub-processes internal to the recruiting system. The RSM enables cross-functional managerial control in a versatile and adaptable platform.

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I. INTRODUCTION TO THE AUSTRALIAN DEFENCE FORCE (ADF) RECRUITING SYSTEM

A. INTRODUCTION TO ADF RECRUITING

As stated by then Minister for Defence, Senator the Honorable Robert Hill in Australia's National Security: A Defence Update 2005, "Providing the capability to defend Australia and Australian interests is the first responsibility of government. The government continues to make the substantial investment necessary in equipment and personnel to ensure that Australia can provide leadership in our region, contribute to coalitions further afield, and more broadly defend our nation and its interests." Defence capability is the most potent of the range of instruments Australia employs to promote and support its security interests.[1] The ADF is the tool that the government uses to support and enforce its strategic policy. What gives Australia's military capabilities the edge is not the "visible" parts of force structure—the "hardware," such as munitions, platforms, systems, facilities—but the workforce components.[2] Workforce is a significant and important part of military capability, those highly skilled and dedicated personnel who make up the ADF. The recruiting system is the first step in the generation of defense capability.[3]

Workforce planning in defense is concerned with achieving the affordable numbers of people having the requisite competencies to deliver the capability outputs required by the government.[4] The goal of workforce planning in defense is to achieve the best possible fit between the demand for workforce and the supply of people, within the resources allocated by the government. The enhanced structure of the ADF outlined in the "Defence Whitepaper 2000: Our Future Defence Force" requires that the strength of the ADF be increased to approximately 54,000 permanent force personnel by 2010. The composition of this force is determined based on the projected operational needs of the

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[1] "Australia's National Security: A Defence Update 2005," *Commonwealth of Australia*, 2005, 9.

[2] "Report of the Strategic Workforce Planning Review 2003, *Commonwealth of Australia*, 2003, 8.

[3] "ADF Recruiting Strategic Plan 05-10," *Defence Personnel Executive*, 2.

[4] Op cit, "Report of the Strategic Workforce Planning Review 2003," 4.

ADF in the coming decade. Demand management is an essential part of the workforce planning system and involves a number of related processes:

- determining the numbers of people and skills required by the workforce,
- setting realistic entry standards,
- maintaining employment category structures to facilitate workforce growth, and
- providing adequate promotion prospects for military personnel.

The other half of the workforce planning system involves the supply of suitably trained people to meet demand. This is achieved through recruitment, training, and retaining the right balance of people who make up the Defence workforce.

The Defence workforce—Army, Navy, and Air Force—is structured as a large, somewhat distorted pyramid. Each level of the pyramid represents a rank in the military hierarchy chain. The workforce structure operates under a strict set of rules: Lower ranks feed into higher ranks (through promotion), the workforce size reduces as rank increases (through separation), new personnel enter the workforce at the lower levels (through recruitment), and supply problems exacerbate as they work up the hierarchy chain (see Figure 1).
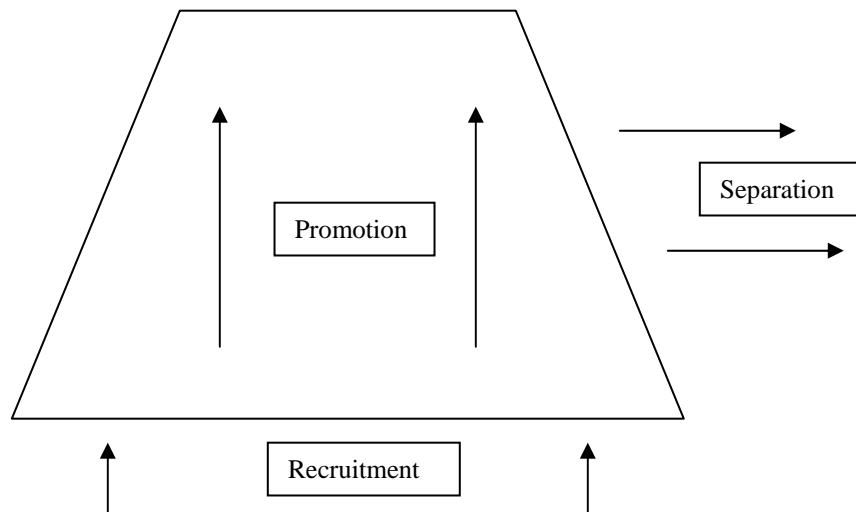
Figure 1. Defence workforce structure

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The ADF workforce is largely a closed system dependent on recruiting from the bottom up. Recruitment supply comes from two sources: ab initio and lateral transfers. Lateral transfers make up only a small percentage of total personnel supply and include the internal transfers within the ADF between active and inactive Reserves to the permanent forces, transfers among the three Services, and transfers from overseas forces. Ab initio recruitment is the primary source of new personnel for the ADF and is the direct result of Defence Force Recruiting (DFR) efforts targeting the civilian population—those with and without prior military service.

B.   THE RECRUITING SYSTEM

The current ADF recruiting system formed as the result of two separate steps: the merging of single-service selection systems into a tri-service system and the commercialization of significant components of ADF recruitment functions.[5]   The purpose of the recruiting system is to provide the right people in the right numbers at the right time in order to generate Defence capability.[6] The supply of interested persons for military service is targeted through aggressive marketing campaigns that seek to promote the ADF as a preferred employer. Interested persons make contact with DFR of their own accord and are able to obtain further information about a military career or can submit an application to join the services. The assessment of these interested persons in order to determine their eligibility and suitability as military service personnel, and subsequent enlistment or appointment into the armed forces, is a lengthy process managed in its entirety by DFR.

DFR is an organization responsible for providing a service to the ADF. The product of that service is the enlistment or appointment of civilians who meet specified entrance standards and have been judged suitable to serve in the military. The recruiting system is a tool that is used by DFR to transform inputs—civilians interested in a military career, into outputs—newly enlisted or appointed military personnel. This transformation occurs through systematic elimination of candidates as they are processed by DFR staff

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[5] Major Anne Goyne and Michelle McNamara, "ADF General Entry Selection: Then and Now," ISSN 1442-0678, Research Report 01/2006, Defence Force Psychology Organisation, February 2006, 7.

[6] Op cit, "ADF Recruiting Strategic Plan 05-10," 1.

through the recruiting system. Providing the right people in the right numbers at the right time requires DFR to meet recruiting goals set by the Department of Defence (DoD). Meeting these recruiting goals with limited control over the input quantity and quality requires careful management of the recruiting process and the resources involved.

DFR has finite resources that are not always correlated with the demanded outputs. Staff, facility, and budgetary constraints restrict the throughput capability of the recruiting system. These constraints require DFR to optimize the use of its resources to maximize the capacity and minimize the cycle time of the recruiting system in order to meet the output targets. Managing the cycle time and capacity requires a thorough understanding of the processes and sub-processes within the recruiting system and how they interact with each other over time and through the sharing of resources.

The current operational model of the recruiting system is shown in Figure 2. This model outlines the processes involved in assessing applicants for eligibility and suitability for military service and their subsequent enlistment or appointment into the Army, Navy, or Air Force. While this operational model captures the entire recruiting system from the time an applicant is booked and prepared for testing to enlistment/appointment, it is a two-dimensional representation of a three-dimensional system. The existing model is not a tool that can be used by managers in a meaningful way to understand how the individual processes within the recruiting system affect each other, nor can it be used to assess how they affect the achievement of recruiting goals.

A candidate contacts Defence Force Recruiting either in person/over the phone or through the Call Centre. The candidate details are entered into Powerforce and they can be provided with an Information Package if only want information.

Candidates who wish to apply are booked for a Job Options Evaluation Session (JOES) or an Information session. The candidate is then sent information brochures and application forms which they need to complete and bring to the JOE/One Day Testing Session

Candidate Booking and Preparation for Testing Procedure

The candidate arrives for the initial testing session and undergoes initial medical screening (MHQ) and aptitude testing. In the JOES process, the candidate is then provided with an information session and is interviewed by a Recruiter who assists the candidate in consolidating their job preferences (this is done prior to the testing day for the One Day Model).
The candidate is then booked into an Assessment Day depending on the availability of the job preference or booked for a DR follow-up

In the JOES process the Defence Recruiter U contacts the candidate up to 7 days prior to confirm their attendance and to ensure that the DR Checklist is completed, in order to prepare them for the Assessment Day

JOES Procedure or One Day Testing Procedure

The candidate arrives for the Assessment Day Session and undergoes Medical Testing, a Psychological Interview and a Defence Interview.
Officer Candidates and some Specialist Testing candidates are booked for their selection boards.

Assessment Day Procedure/ Officer and Specialist Testing Procedure

Successful candidates have their applications reviewed, a letter of offer is generated and the candidate is booked to an Enlistment/Appointment Day.

Candidates are sent an Enlistment Package and are contacted several times by the Enlistment Coordinators to ensure preparations for enlistment/appointment have been made, including successful completion of the PFA and return of the relevant forms at least a week prior to the ceremony.

Preparation for Enlistment and Appointment Day Procedure

On the Enlistment Day candidates attend a medical attestation, an enlistment/appointment ceremony and they are then transported to their training establishment (with the exception of DTU candidates and Reserve Officers who then attend their unit).

Enlistment and Appointment Day Procedure

Figure 2.   Existing Recruiting System Model[7]

In upcoming years Australia's demographic trends will have an unprecedented impact on the external labor market's capacity to satisfy Defence recruiting needs. The major effects are: ageing of the Australian population, falling labor market participation rates, and increasing wage pressures. Although the population of Australia is expected to grow from 19.7 million in 2002 to 25 million in 2051, the growth rate is expected to fall from 1.2% to 0.1% over the same period. By 2030 the natural growth rate will be

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[7] "Defence Force Recruiting Process Reference Guide," *DFR-TRAREF002*, issued December 15, 2003, 3.

negative; by 2014 the 17–24 year old segment will begin to decline[8]. This segment is the target of Defence recruiting marketing efforts. The current labor market participation rate is falling as the combined result of several factors. More females are being employed in the workforce at the expense of male employment. The part-time and casual employment sectors are increasing. While the labor market participation rate is falling there have been nearly one million new jobs created in Australia over the last five years, mainly due to global labor market influences[9]. Simply economics theory dictates that when employment supply decreases and employment demand increase the result is an increasing wage rate. Defence is struggling in this rapidly changing labor market to offer competitive wage rates.

The operational tempo of the ADF is at a level not seen since participation in the Vietnam War over 30 years ago. Whether it is the military's continual involvement with East Timor since 1998 or with the War on Terror since 2001, the ADF has had significant levels of troops deployed on operations around the world for the past eight years. This international presence is having an impact on the supply of interested candidates. For "non-rejectors" of an ADF career (those persons who are positively disposed towards a career in the ADF) this operational tempo has a positive influence. For the remainder of the targeted population the operational tempo has a negative influence as traditional influencers such as parents and teachers steer youth towards other career opportunities. When considered together with the demographic trends affecting the labor market, the ADF is slowly loosing its status as an employer of choice amongst the targeted youth population segment, reducing the supply of interested candidates into the Initial Contact process in the recruiting system. With a reduction in initial supply, ensuring that DFR is an effective and efficient organization for processing applicants is paramount.

The Australian economy has experienced a significant slowdown in growth, as evidenced by the National Accounts figures released by the Australian Bureau of Statistics in 2006. The economy should resume a healthier level of growth once increases in fuel prices have worked their way through the economy's supply channels.

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[8] "3222.0 Population Projections, Australia, 2004 – 2101," *Australian Bureau of Statistics*, June 14, 2006, 38.

[9] "Current Workforce Supply Pressures," Defence Workforce Planning and Management Briefs 2005.

Despite the slowdown, the job market has revealed its strength, with unemployment still close to record lows and no significant increases predicted in the short to medium term[10]. The outlook for DFR in the foreseeable future is a continuation of a tight labor market. A tight labor market has a negative impact on the supply of interested candidates into the recruiting system. This reduction in supply makes it imperative that the transformation of inputs (interested persons) into outputs (enlisted and appointed military personnel) within the recruiting system is optimized so that the supply of ab initio recruits into the Defence workforce is not detrimentally affected. In order to optimize this transformation it is essential that decision makers have a thorough understanding of the ADF recruiting system.

C.   RECRUITING SYSTEM MODEL

Using avant-garde commercial-of-the-shelf (COTS) process modeling software, the author will build a Recruiting System Model (RSM) to capture the entire ADF recruiting system in three dimensions. This RSM will become a tool for Defence and DFR managers at all levels that will enrich their ability to assess, analyze, and improve the recruiting system. The primary purpose of the RSM is to clearly define each of the processes and sub-processes within the recruiting system so that the individual and collective performance of these processes and sub-processes can be measured and evaluated. This evaluation will enable managers to identify the following information:

- any bottlenecks that are limiting the capacity or reducing the cycle time of the recruiting system,
- the value of each step in the processes and sub-processes within the recruiting system, and
- the location, cause, and cost of candidate withdrawals from the recruiting system.

Using this information, DFR and DoD managers, policy-makers, and decision-makers will be in a position to develop courses of actions for performance improvements and assess the feasibility of these courses of actions by using the RSM.

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[10] "Defence Force Recruiting Intelligence Briefing," *Defence Force Recruiting*, issued February 2, 2006, 4.

ADF recruiting comprises all the elements of Defence and its partners that are involved in the attraction and recruitment of ADF personnel. ADF recruiting is intimately linked to personnel policies, career management, initial training regimes, retention performance, and strong leadership. At the corporate level the RSM is a tool to be used for systems analysis. The RSM can assist senior DFR managers to more completely understand the relationship between the ADF recruiting system and its internal and external environment (see Figure 3). The interactive nature of this relationship makes it necessary to constantly monitor the environment and make corresponding changes in recruiting operations when needed.

The use of the RSM at the senior managerial level will reduce the time it takes to assess the impact of changes in the external and internal environment and allow for continual incremental improvement of the ADF recruiting system. External environment changes such as fluctuations in the national unemployment rate and the tempo of ADF operations can increase or decrease the supply of interested persons into the ADF recruiting system. Internal environment changes include variations in DFR resources (personnel, facilities, and finances), modifications to the recruiting system structure or amendments to policies dictating Defence entrance standards. The impact of these external and internal environment changes on recruiting can be assessed individually or collectively using the RSM.
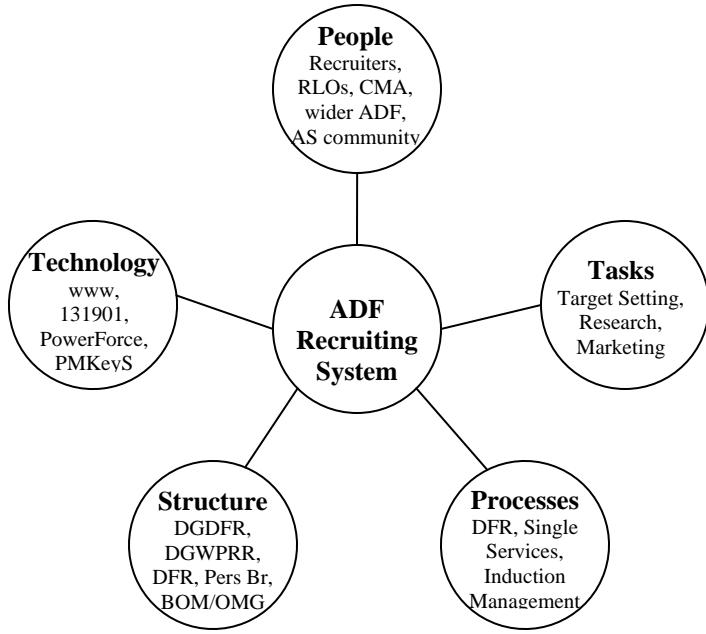
Figure 3.   ADF Recruiting System

At the Business, Area, and Branch managerial levels of DFR, the RSM can be used to increase managerial control of individual processes within the recruiting system. The RSM is an improvement on existing tools managers use to assist in the identification of objectives, constraints and alternative courses of actions to improve the output of the recruiting system. Rather than relying on individual and collective experience and judgment to assess probable consequences of alternative courses of actions, using the RSM will allow the consequences of alternative courses of actions to be presented in a comparative framework so that the decision makers can make an informed decision from among the alternative courses of actions under consideration. Using the RSM to support process assessment and analysis will aid in cross-functional decision making, increase integration within and between processes and facilitate improved coordination of efforts toward continual improvement of the recruiting system.

The top level of the RSM is shown in Figure 4. Applicants are assessed for eligibility and suitability against strict entrance standards by a multitude of entities within the DFR organization in five consecutive processes: Initial Contact (1), Job Option Evaluation Session (JOES) (2), Assessment (3), Officer Selection Board (OSB)/Flight Selection Board (FSB) (4), and Enlistment/Appointment Processing (5). The linear

nature of the recruiting system when viewed at this level of the RSM has several significant impacts on the flow dynamics of applicants. Primarily, the outflow of applicants from each process is equal to the inflow of applicants at the following process. Bottlenecks result when the capacity of one process is less than the throughput of the preceding process. Because resources are shared among the five processes, it is impossible to affect the capacity of a process in isolation from other processes.
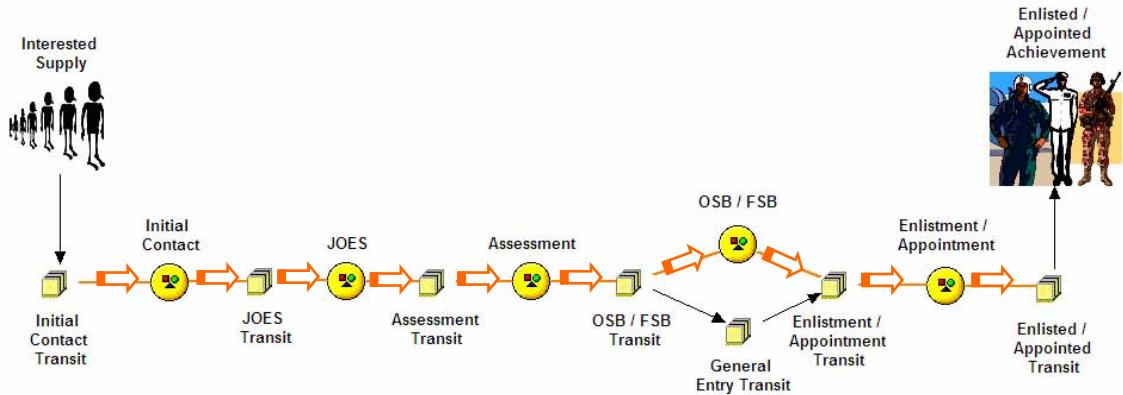
Figure 4.   New Recruiting System Model

The software program Enterprise Optimizer® by River Logic will be used by the author to build the RSM. The unique capabilities Enterprise Optimizer® gives to the RSM ensure that it is an integrated decision-analysis solution that will provide powerful insights for better decision making across the DFR organization. Enterprise Optimizer® is a software solution powerful and flexible enough to assist strategic, tactical, and operational analysis, as well as assessment and improvement of the recruiting system. Drilling down into each of the five processes provides managers with a detailed understanding of the sub-processes, events and activities that occur and the ability to manage the recruiting system. For example, DFR managers can use the RSM to create operational plans that align local and regional marketing efforts with personnel and facility resources in order to optimize applicant throughput.

The RSM enhances coordination between managers, team leaders, and senior staff by providing a single model that encompasses the entire recruiting system. Each manager, team leader, and senior staff member can easily recognize the association

between their area of responsibility and that of another, allowing greater cross-functional command and control. This will in turn foster improved sharing and utilization of facility, financial, and personnel resources with the objective of boosting system throughput and subsequent achievement of Defence recruiting goals. Improved understanding of the complex interaction that exists between processes, gained through the use of the RSM, can reduce instances of the unintended consequences one manager's actions and decisions can have on other processes outside of their immediate command.

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II.   METHODOLOGY AND MODEL STRUCTURE

A.   PROCESS MODELING

A current conceptual concept for constructing models of activities of interest is Enterprise Modeling (EM). A definition for EM representative for most applications is that "Enterprise Modeling is the process of understanding a complex social organization by constructing models."[11] EM is domain free, meaning it is not limited to any particular business domain. An EM is a computational representation of the structure, activities, processes, information, resources, people, behavior, goals, and constraints of a business, government, or other enterprise. The modeling of the enterprise network should facilitate the enhanced understanding of the business processes of the extended enterprise and relations that extend across the boundaries of the enterprise.   This way a quick understanding can be achieved throughout the enterprise about how business functions are working and how they depend on other functions in the organization.[12]   Process modeling is one technique available to model the enterprise.

The original purpose of process modeling was to replicate and analyze a product development process in order to help people better understand, manage, and optimize the product development process.[13]   Today, process modeling is a technique used by organizations to understand, define, and precisely represent the underlying business processes. No longer confined to product development, process modeling is used to simulate the know-how and know-why of any business practice that involves the transformation of an input into an output. Process modeling is used to precisely represent complex business processes that would be difficult to understand based on the business requirements alone.

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11 Totland, Terje and Conradi, Reidar, "A Survey and Comparison of Some Research Areas Relevant to Software Process Modeling," *University of Trondheim*, Norway, http://www.idi.ntnu.no/grupper/su/publ/pdf/ewspt95-rel-areas-pp.pdf, accessed August 01, 2006.

12 "Enterprise Modeling," from Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/wiki/Enterprise_modeling, accessed August 01, 2006.

13 Qianwang, Deng and Dejie, Yu, "An Approach to Integrating Knowledge Management into the Product Development Process," *Journal of Knowledge Management Practice*, Vol. 7, No. 2, June 2006, http://www.tlainc.com/articl114.htm, accessed August 1, 2006.

B. RIVER LOGIC—ENTERPRISE OPTIMIZER®

While process models are a valuable tool for any organization, they are often difficult and time-consuming to produce by hand. The level of data collection and detail required for process modeling makes it a good candidate for an automated tool. The use of a process modeling tool allows the documentation of the underlying processes. It can tie the process activities together and will keep track of inputs and outputs. Tools can inform the user where there are disconnects and overlaps between activities and events, whether process steps are missing and identify any similarities between multiple activities. Process modeling tools are valuable because they capture all the detail and point out process errors and discrepancies.[14] Most process modeling tools can represent all the textual information gathered in pictorial or graphical form, which allow the user to view how activities and information flow within a process.

River Logic is a leading developer of proprietary network applications that focus on decision-making and process optimization in vertical marketplaces. River Logic creates and operates integrated networks of decision support tools, e-learning solutions, and e-commerce capabilities that revolutionize the manner in which decision-makers leverage knowledge and information, allowing them to gain decisive competitive advantage. River Logic offers strategic planning software, which can be used to plan, track, forecast, and optimize budgets, costs, profits, and cash flow across suppliers, customers, and product lines. The company's core application, Enterprise Optimizer®, was developed in collaboration with the Russian Academy of Sciences and mathematicians at the University of Massachusetts. Enterprise Optimizer® is a business planning, budgeting, and intelligence package. It is designed to model, analyze, and solve important business issues such as opening or closing divisions, merging or acquisition decisions, capital improvements, procurement, product planning, market planning and resource allocation. Enterprise Optimizer®'s key features include a drag-and-drop visual modeling interface; use of common business objects; ability to model multiple time periods; ability to track unit costs and margins throughout the model; many advanced visualizations; ability to add integer and binary constraints; import and export

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14 Mochol, Tom, "Use Process Modeling to Gain Precision and Clarity," *Tech Republic's Builder.Com*, November 20, 2001, http://builder.com.com/5100-6315-1044107.html, accessed August 01, 2006.

data to spreadsheets or enterprise systems including Microsoft Excel, Access and SQL Server, and Oracle; and ability to create custom dashboards and reports, including financial statements.[15]

When the United States Army Accessions Command (AAC) was first activated at Fort Monroe, Virginia on March 25, 2002, it had the task of overseeing recruiting and training of both enlisted soldiers and officers from "First Handshake" to "First Unit." One of the most significant challenges faces by the AAC was that the U.S. Army did not have a model that represented the entire officer and enlisted accession process to address requirements set by the Objective Force Soldier design. The Naval Postgraduate School (NPS) was contracted to deliver this model and sub-contracted with Management Analysis Technologies, Inc., (MAT) to achieve the aggressive timetables and deliverables. River Logic's Enterprise Optimizer® was used for this project.

The Accessions Process Optimization Model—Active Enlisted (APROM-AE) was the deliverable for this project (see Figure 5). The APROM-AE included the following:

- A system process flow model diagram portraying Enlisted Active end-to-end accessions process to include critical paths and critical nodes in the accessions process.

- A data application for managing external data feeds for the accession process to include generating seasonality and cyclical data patterns, selecting Military Occupational Specialties (job categories), adjusting Delayed Entry Program losses, and establishing metrics and constraints.

- A "dashboard-style," menu-driven optimization model to simulate the accessions process across a multiple time-period future, with unique characteristics of varying skill requirements and market characteristics that may enable successful enlisted recruiting and training.

The successful use of Enterprise Optimizer® by Col B.J. Thornburg, Dr. G.W. Thomas and Dr. D. Dolk to develop a model that was subsequently used by AAC to improve their understanding of the accessions process suggested that this software would adequately meet the needs for use in building a RSM that captured the DFR recruiting process from "Initial Contact" to "Enlistment/Appointment." With the aid of COL B.J.

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[15] "River Logic Product Description," *Advanced Manufacturing Software Directory*, http://www.advancedmanufacturing.com/Vendors/river_logic.htm, accessed August 1, 2006.

Thornburg and Dr. G.W. Thomas, a trial license was obtained from River Logic to use their Enterprise Optimizer® software for this thesis.
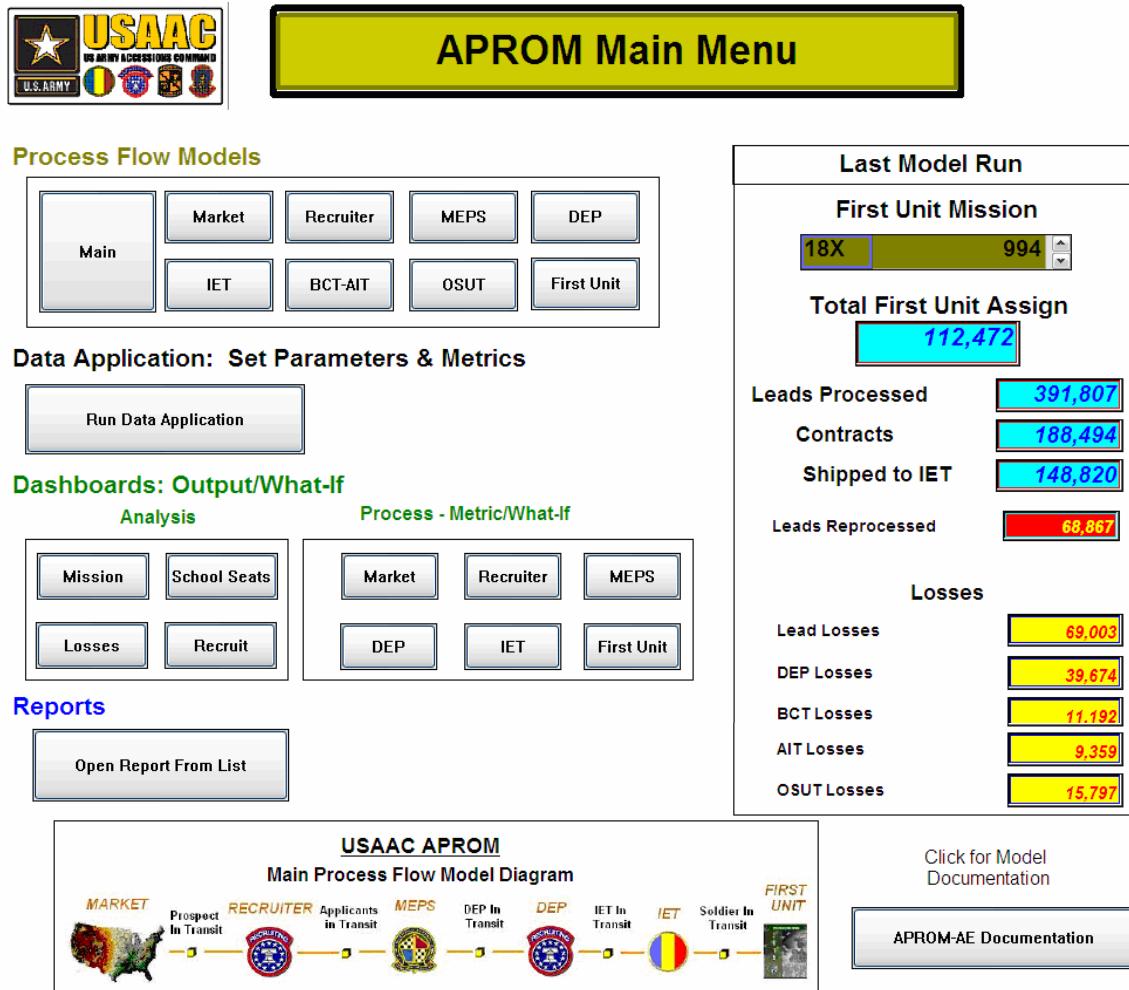
Figure 5.   APROM-AE designed by Thornburg, Thomas and Dolk

C.   RECRUIT SYSTEM MODELING

The first step in creating the RSM with Enterprise Optimizer® software was to build a visual representation that captures the ADF recruiting system —from individual events occurring at the sub-process level to the enterprise as a whole. The RSM was designed so it could be used by personnel with no prior knowledge of the ADF recruiting system or the processes within, as well as by personnel with various levels of familiarity and expertise. Information was sought from currently employed DFR staff on the actions

taken by prospective applicants and employees from Initial Contact (Process #1 on Figure 2) through to Enlistment/Appointment (Process #5 on Figure 2). This information is related to the existing policies and procedures that dictate the assessment of applicants for eligibility and suitability for military service as they progress through the recruiting system.

Once all information relevant to the recruiting system was gathered in adequate detail, individual activities were identified and organized into chronological sequence. This information was examined to identify a high-level series of related activities that represented one logical process. Activities were divided into five processes based on analysis of the personnel and facility resources utilized, applicant categorization, managerial levels of command and control, and existing responsibility divisions (see Figure 2). Each process is composed of a path along which applicants are transformed through activities performed by resources. Naming conventions for these five processes followed what was already in place and commonly used among DFR and ADF employees for continuity reasons. Individual models of each of the five processes were visually designed before data were added to represent the flow of individual applicants through the activities within each process. The data included approximate transformation yield ratios at each activity and throughput rates at each event and process based on personal experience. The data flow provided for the division of applicants based on the recruiting goals set by Defence (Service goals and broad job category goals).

1.   Initial Contact

Initial Contact is the first process in the ADF recruiting system (see Figure 6). Interested persons make contact with DFR either by phone or by submitting an application via a Defence web portal. Defence Service Centre (DSC) staff, the first point of contact for the majority of applicants, are responsible for the initial division of potential applicants into two groups: those seeking further information or those who are not of age to serve in the military (enquirers), and those seeking to submit an application for entry (applicants). Persons ineligible to join because of age or those who are seeking only information are withdrawn from the recruiting process. All withdrawals are

recognized as a system loss. Enquirers have the opportunity to re-contact DFR and submit an application for entry at a later time.

Personal information is gathered on applicants regarding their citizenship, military service history, criminal history, and education. Those applicants who do not have Australian citizenship or permanent residency, have previously served in any branch of the Australian military, have a criminal background, or do not have the minimum education level required are referred to a Defence Recruiter (DR) who determines eligibility for further assessment in the recruiting system. The DR withdraws those applicants not meeting entrance requirements and allows the remainder to continue through the recruiting system.

Those applicants approved by a DR to continue with their application, together with the applicants who were not referred to a DR for further questioning, are given the opportunity to select up to three job positions for which they are interested in applying for entry. Applicants applying for a Reserve branch of military service are transferred to a Reserve unit for evaluation on grounds of suitability. Suitable applicants are reassigned to DRs and unsuitable applicants are withdrawn from the recruiting system. All applicants must then physically attend their nearest DFR location where nursing staff, psychology staff, and DRs continue to assess applicants for eligibility in greater detail as part of the JOES process.
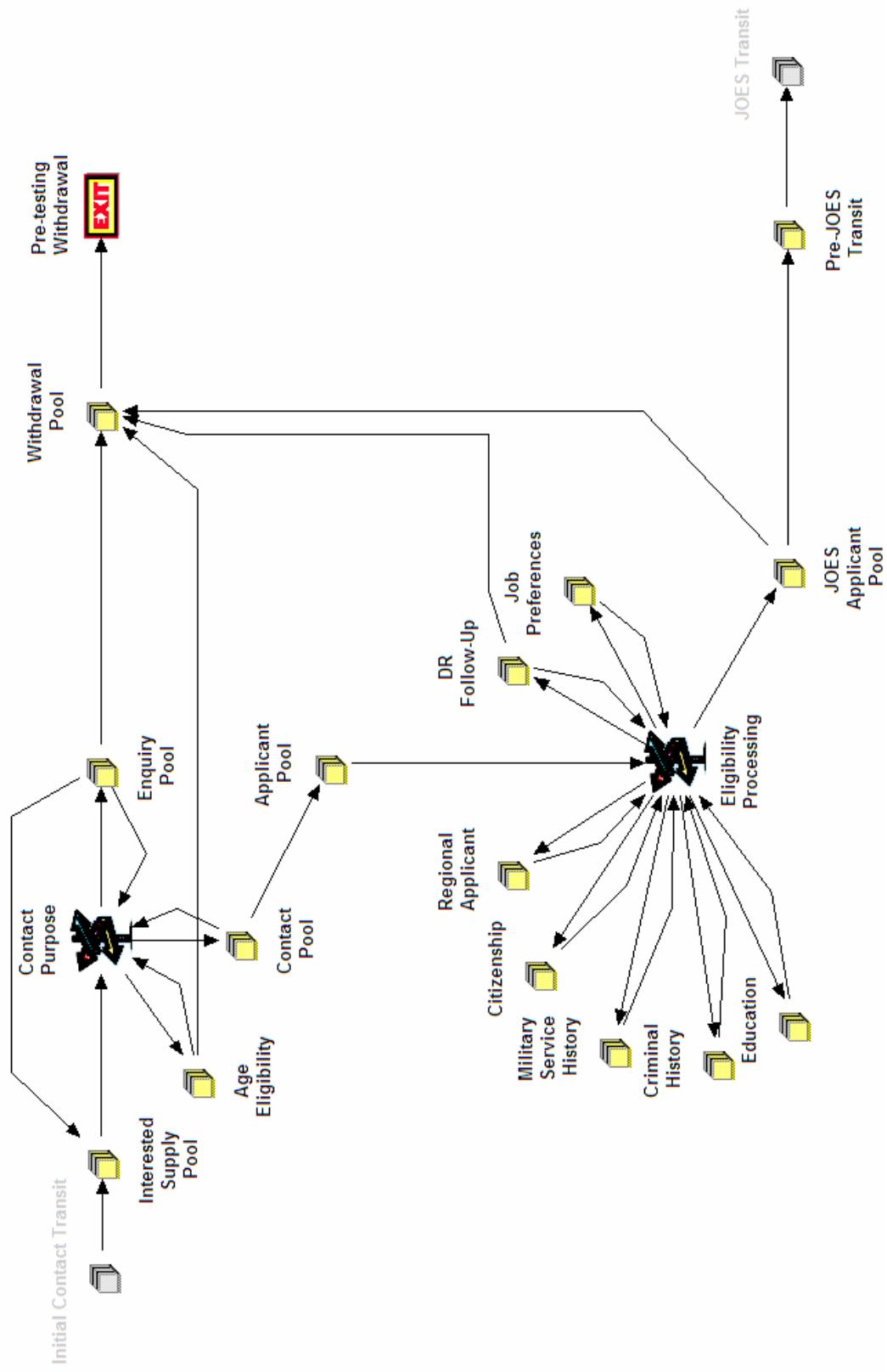
Figure 6.   Process 1—Initial Contact

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2.   JOES

Applicants are booked to a JOES at a time and place that suits both the applicant and DFR. The conduct of JOES is shown in Figure 7. Applicants who have previous military service must wait until their service record is provided to DFR before a judgment is made whether they are eligible to reapply for entry into the military. Applicants who are not eligible to reapply for entry are withdrawn from the recruiting system; applicants eligible to reapply are booked to a JOES. Prior to the date of their JOES booking, DFR staff contact applicants to ensure they are aware of their appointment and are prepared with the necessary documentation that must be brought. Applicants have the opportunity to withdraw from the recruiting process, to rebook their JOES appointment, or to continue with the existing booking.

Applicants who fail to attend their JOES booking are contacted by DFR staff and provided with the opportunity to rebook to another appointment or be withdrawn from the recruiting system. Once at the JOES, applicants have their identification confirmed. Those applicants who have failed to bring appropriate identification are given the opportunity to rebook to another JOES or are withdrawn from the recruiting process. Those applicants who are under 18 years of age must show proof of parental consent to join the military. Applicants without the required documentation are given the opportunity to rebook to another JOES or are withdrawn from the recruiting process.

Applicants are then given an aptitude test that provides each applicant with an individual General Aptitude Score (GAS). Those applicants whose GAS score is below the minimum entry level are withdrawn from the recruiting process. Those applicants with an adequate GAS score who have job category that requires specialist testing as one of their preferences for entry are submitted to a further test battery. Technical job category applicants are given a technical aptitude test that provides each applicant with an individual Technical Aptitude Score (TAS). Applicants with a TAS that is below the minimum entry level are advised that they can not be considered for technical job categories for entry. Pilot job category applicants are given a Pilot Score that will be used at later in the process within the recruiting system.
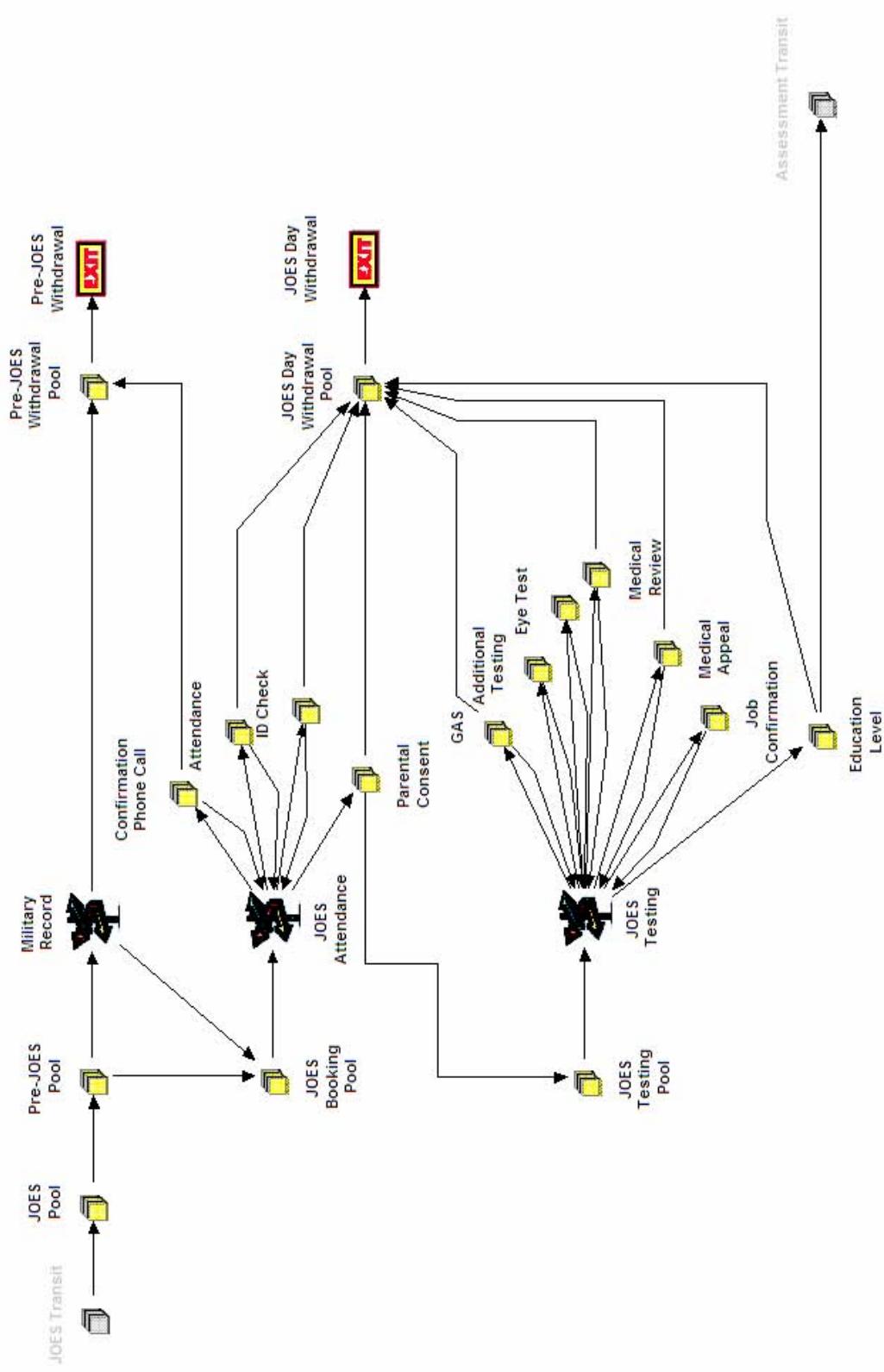
Figure 7.   Process 2—JOES

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All Applicants are given a basic eye test to determine what level, if any, of visual impairment they have. Applicants have their Medical History Questionnaire (MHQ) reviewed by a nurse and basic medical information is gathered. Applicants with a medical condition that precludes them from particular job categories are given the opportunity to change their job preferences for entry into the military or withdraw from the recruiting process. Those applicants with a medical condition that precludes them from any military service are advised that they are not eligible to continue with their application. These applicants are given the opportunity to appeal this decision and can withdraw from the recruiting process without submitting an appeal. Each appeal is considered on its own merits; applicants either have their appeal granted and are permitted to continue the recruiting process, or their appeal is denied and they are withdrawn from the recruiting process.

Applicants permitted to continue with their application, either through waiver or by a Nursing Officer (NO), are counseled by a DR regarding their job category preferences for entry. Applicants are directed to job category preferences that for which they have met GAS, TAS, and medical entry standards. Applicants then have their education level assessed against their chosen job position for entry. Applicants with appropriate education levels for their chosen job category are progressed in the recruiting process. Applicants without the appropriate education levels are counseled by a DR and can choose to withdraw from the recruiting process or continue with their application without meeting the minimum education levels.

3.   Assessment

Applicants are booked for assessment at a time and place that suits both the applicant and DFR. The Assessment process of the recruiting system involves a detailed investigation into the applicant's physical and mental suitability for entry into the military (see Figure 8). After attending the assessment appointment, applicants undergo separate examinations by nursing staff, doctors, psychologists, and experienced military officers or warrant officers. Approximately one week prior to the applicants attending their assessment appointment, DRs will attempt to contact the applicants and conduct a mini-interview that identifies the applicants' level of knowledge regarding conditions of

service and particulars of the job category they have chosen for entry into the military. The applicants are able to withdraw from the recruiting process at this time. The DR determines whether the applicant is suitably prepared for assessment and can re-book the applicant to a later assessment appointment if the DR feels more time is needed for the applicant to prepare. If the DR is not able to contact the applicant prior to assessment, the original appointment is maintained. A confirmation phone call is made several days before the assessment appointment date by the DR. The applicant has the opportunity to withdraw from the recruiting process at this time, confirm attendance, or re-book to a different assessment date. If an applicant fails to attend the assessment appointment, he or she is re-booked to a later assessment date and notified of the change in writing.

Once applicants have attended their assessment appointment, they are interviewed by a NO. The NO calculates the Applicants' Body Mass Index (BMI) using their weight and height. If the applicants have a BMI that is outside of the acceptable range, they are able to withdraw from the recruiting process. If the applicants do not wish to withdraw, they can have their body fat percentage calculated. If the applicants have a body fat percentage that is outside of the acceptable range for military entry, they are able to withdraw from the recruiting process. Those applicants who have a BMI within the acceptable range and those applicants who have chosen to continue their application with unacceptable BMI or body fat percentage are then given a detailed eye examination.

Applicants with visual impairment that excludes them from military service for all job categories, or for only their preferred job position, are able to withdraw from the recruiting process if they desire or change their preferred job position. Applicants without visual impairment and those applicants with visual impairment continuing with their application are required to provide a urine sample. Applicants who present a urine sample with positive results that prohibit entry into the ADF, or present a urine sample that identifies pregnancy, are able to withdraw from the recruiting process. Applicants who have not failed any stage of the nurse examination, and those applicants who have chosen to continue with their application despite failure at any of the examined areas, are then examined in depth by a doctor.

The doctor conducts an initial examination of the applicants and assesses their medical history. Applicants with no existing injuries or previous injuries that may prohibit military service are progressed to an interview with a psychologist. Applicants with existing injuries that can be resolved without prohibiting military service are also progressed to an interview with a psychologist. Applicants with an existing injury that can be resolved but may potentially prohibit military service, or applicants with previous injuries that will potentially prohibit military service, are referred to a specialist for further medical review. These applicants can either withdraw from the recruiting process or undertake further medical review by a specialist of their particular condition.

Applicants who are recommended to continue with their application after further specialist medical review are progressed to an interview with a psychologist. Those applicants who are not recommended to continue with their application after further specialist medical review are given the opportunity to appeal the decision. If an applicant does not appeal the decision, he or she is withdrawn from the recruiting process. If an applicant appeals the decision or is granted a waiver for the medical condition, he or she is progressed to an interview with a psychologist. Applicants who have appealed the medical decision and have their appeal denied are withdrawn from the recruiting process.

After an intense one-on-one interview, the psychologist can recommend the applicant for military service, not recommend the applicant for military service, or declare the applicant unsuitable for military service on psychological grounds. Applicants recommended or not recommended by the psychologist are processed to an interview with a Defence Interviewer (DI). Applicants declared unsuitable for military service on psychological grounds are able to withdraw from the recruiting process or may appeal the decision. Applicants who appeal the decision and have their appeal granted are progressed to an interview with a DI. Applicants who have their appeal denied are withdrawn from the recruiting process.
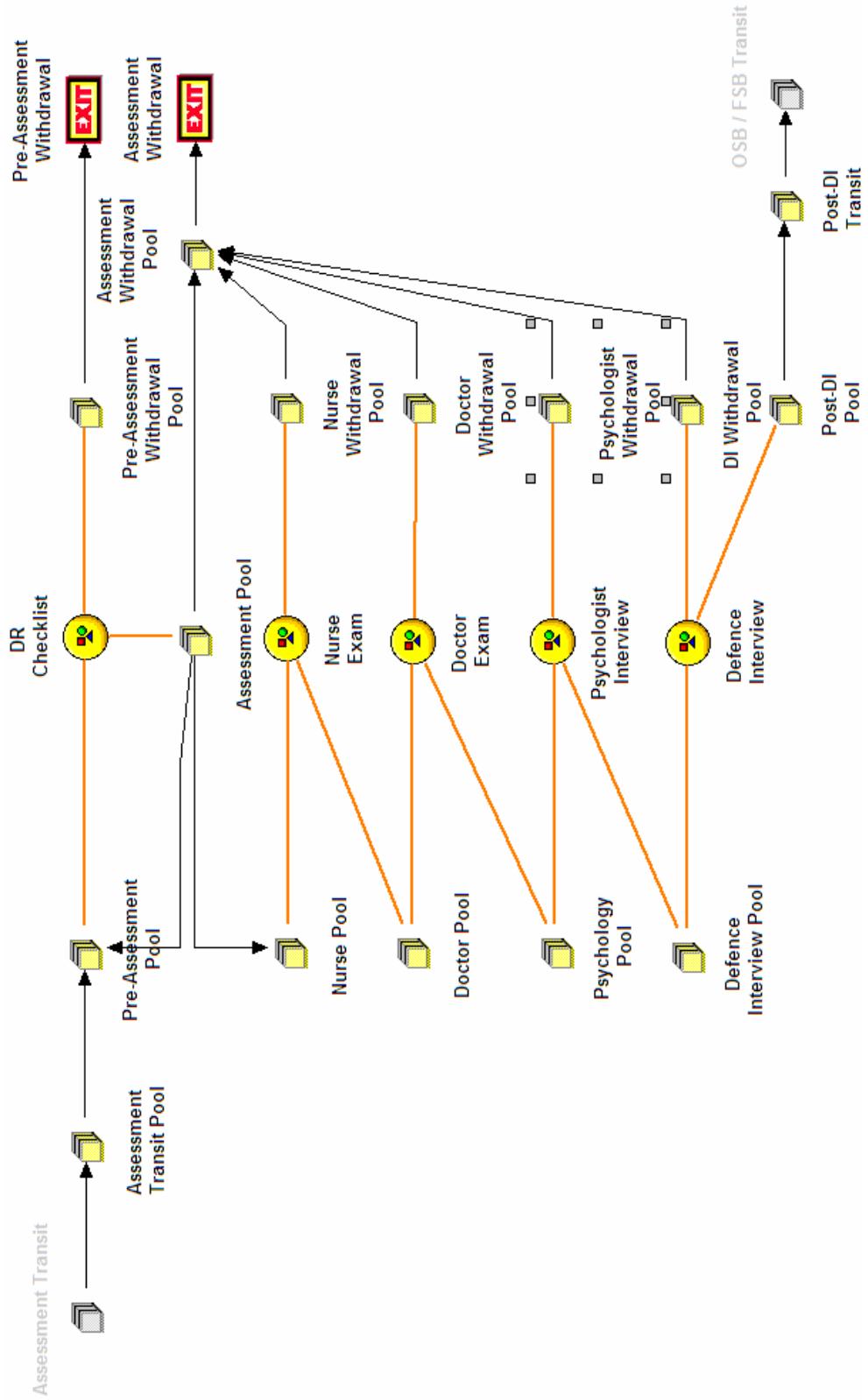
Figure 8.   Process 3—Assessment

Applicants are interviewed by a DI who makes a judgment on their suitability to join the military based on their personality, application history, and the comments made by the psychologist. Applicants recommended by a DI for military service will then have their medical classification reviewed. Applicants not recommended by a DI for military service may have their application deferred for a specified period of time. If this course of action is decided on by the DI, the applicant has the opportunity to withdraw from the recruiting process. If the applicant returns for a second Defence Interview he or she is reassessed by a DI as to their suitability for military service.

Applicants attending their second Defence Interview are either recommended for military service and then have their medical classification reviewed, or not recommended for military service. Applicants not recommended at their first or second Defence Interview and who do not have their application deferred are able to withdraw from the recruiting process or submit an appeal against the DI's decision. Applicants who are successful with their appeal will then have their medical classification reviewed. Applicants who have their appeal denied are withdrawn from the recruiting process.

Applicants who have been recommended by a DI or are granted their appeal receive a final review of their medical classification. Applicants who are classified medically fit for entry and have selected an officer entry scheme as their first job preference are progressed to FSB for pilots or OSB for all other officer entry schemes. Applicants who are classified medically fit for entry, and have selected a general entry scheme as their first job preference, are progressed to the Enlistment/Appointment process. Applicants who are not classified as medically fit are withdrawn from the recruiting process.

4. OSB / FSB

Applicants who have selected an officer entry scheme as their first job preference are processed to OSB or FSB for pilots (see Figure 9). The number of OSB and FSB positions can be insufficient for the number of applicants recommended by DIs. Those Applicants who do not receive a position at an OSB or FSB are withdrawn from the recruiting process. Those applicants who receive an OSB or FSB position are required to

attend the OSB or FSB at a designated time and location. Applicants who fail to attend their OSB or FSB are withdrawn from the recruiting process. Applicants who attend the OSB or FSB are assessed by senior military staff as to their suitability for military service in their chosen job category. Applicants not recommended by the OSB or FSB staff are withdrawn from the recruiting process. Applicants recommended by the OSB or FSB staff are then progressed to the Enlistment/Appointment process.
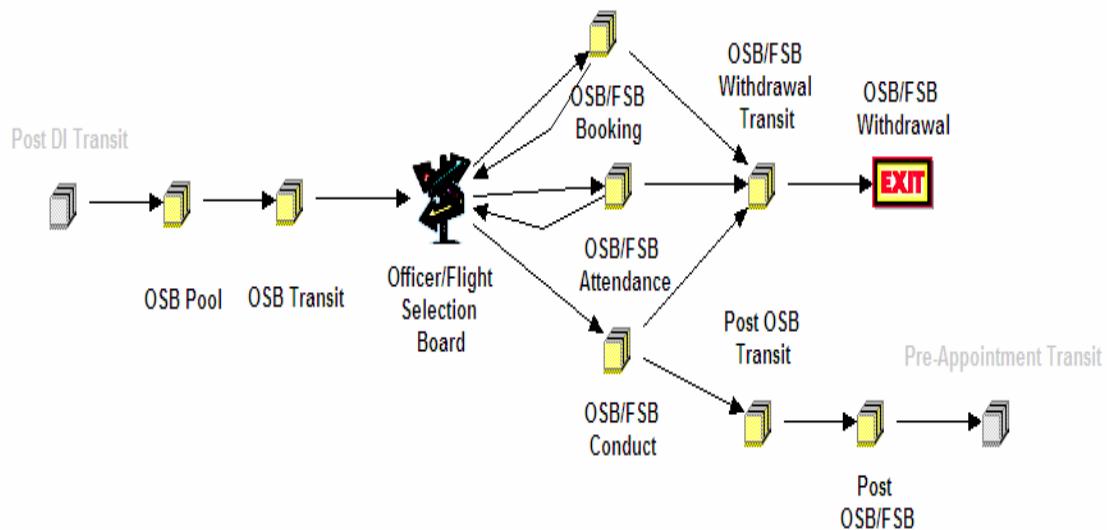
Figure 9.   Process 4—OSB/FSB

5.   Enlistment/Appointment

Officer entry applicants who have been recommended for appointment at an OSB or FSB, and general entry applicants who were recommended by a DI and passed a medical review, begin preparation for enlistment or appointment (see Figure 10). The first activity in this process involves the applicants passing a Preliminary Fitness Assessment (PFA) to the necessary standard required for their first job preference. Applicants are given several opportunities to pass the PFA, but will not progress to the next activity until they have done so. Applicants who fail to pass the PFA are withdrawn from the recruiting process. Applicants who have successfully completed the PFA are required to provide a blood sample that is tested for several diseases and conditions that can prevent military service. Applicants with positive blood test results are withdrawn from the recruiting process, while the remainder are matched against a recruiting goal

that DFR is required to fill to meet Defence demand. Each applicant matched to a recruiting goal, or target, is allocated an enlistment or appointment date. Applicants who are not matched to a target due to a mismatch between their first job preference and the recruiting goals set by Defence are placed in a holding pool until a target becomes available, or are withdrawn from the recruiting process at their request.
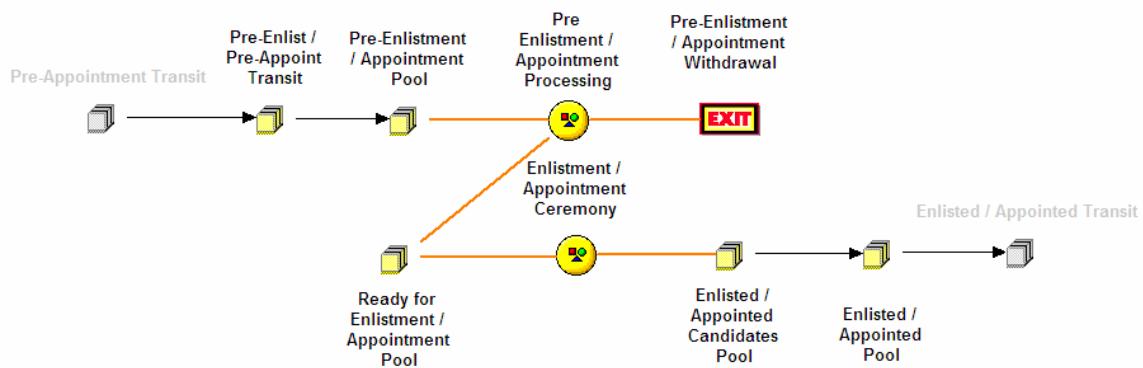
Figure 10.   Process 5—Enlistment/Appointment

Applicants with an enlistment or appointment date have a police check conducted into their background and apply for military security clearance. Applicants who fail the police check or do not provide DFR with their military security clearance application are withdrawn from the recruiting process. Within a week of the applicants' enlistment or appointment date they are contacted by a DR to ensure they are ready to join the military on the specified date. Applicants who have had their personal circumstances change and are no longer in a position to be enlisted or appointed are withdrawn from the recruiting process. Applicants attend their enlistment or appointment date and have their medical status reviewed.   Applicants who no longer meet the medical entry standards are withdrawn from the recruiting system.   Applicants who meet the medical entrance standards have an enlistment or appointment ceremony where they are officially admitted into the military for service.   Regular contact is made between DFR staff and the applicants during the Enlistment/Appointment process to monitor applicant progression through the various events and activities required to meet final requirements for

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successful enlistment or appointment. At this point DFR is considered to have achieved a recruiting goal as set by Defence and the applicant progression through the recruiting system is completed.

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III.   PROCESS ONE—INITIAL CONTACT

A.   DESCRIPTION

As the first process in the RSM (see Figure 6), "Initial Contact" has two primary purposes: dividing the interested persons into enquires and applicants, and screening applicants for major ineligibility criteria such as criminal history or citizenship status. These two purposes occur as events in the Initial Contact process; called "Contact Purpose" and "Eligibility Processing" in the RSM (see Figure 11).   Each event has several activities conducted within it that transform the inputs into outputs by using DFR resources and following DFR policies.

1.   Contact Purpose

The Australian Labor Market is the external workforce pool that all employers draw from, and the ADF is no exception. The input for this event is considered to be all persons who make contact with DFR with an interest in pursing a career in the ADF. At the point of initial contact with DFR only one thing is known about the interested person: gender. The ADF policy on the employment of Service members is to provide equal opportunity consistent with operational effectiveness. Men and women can compete equally for employment except those involving "Direct Combat Duties."[16]

a.   *Age Eligibility*

The first activity to occur in this event is the division of interested persons into age eligibility groups. The ADF policy on the recruitment and employment of members under the age of 18 years (minors) requires compliance with Australia's Protocol obligations. While the Protocol requires State Parties to raise the minimum voluntary recruitment age above the age of 15 years, the ADF observes a minimum voluntary recruitment age of 17 years. The exception to this rule is entrants to military schools, apprentices, and members of Service cadet schemes. All minors must have written consent of their parent or guardian to join the Services before their enlistment or

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[16] "Employment of Women in the ADF," *Defence Instructions (General) Personnel 32-1*, January 31, 1994, 1.

appointment.[17] DFR policy states that interested persons must be 16 years of age before they can apply for entry into the ADF.[18]

The maximum age at which a person can join the ADF is calculated by considering the length of service required for a return on the investment made through training, called the Initial Minimum Period of Service (IMPS).[19] The IMPS and compulsory retirement age (CRA) vary between the Services and job categories within each Service.[20] The maximum entry age (EAL) is calculated by subtracting the IMPS from the CRA for ADF personnel.[21] Although the interested persons have not yet identified the specific job category in which they are considering applying for entry into, DSC staff are able to provide information to them on any exclusions for entry that may apply to them because of age, and are able to exclude candidates that are too young or too old for any job category. Interested persons excluded on the basis of their age are withdrawn from the RSM as a system loss from the Initial Contact process.
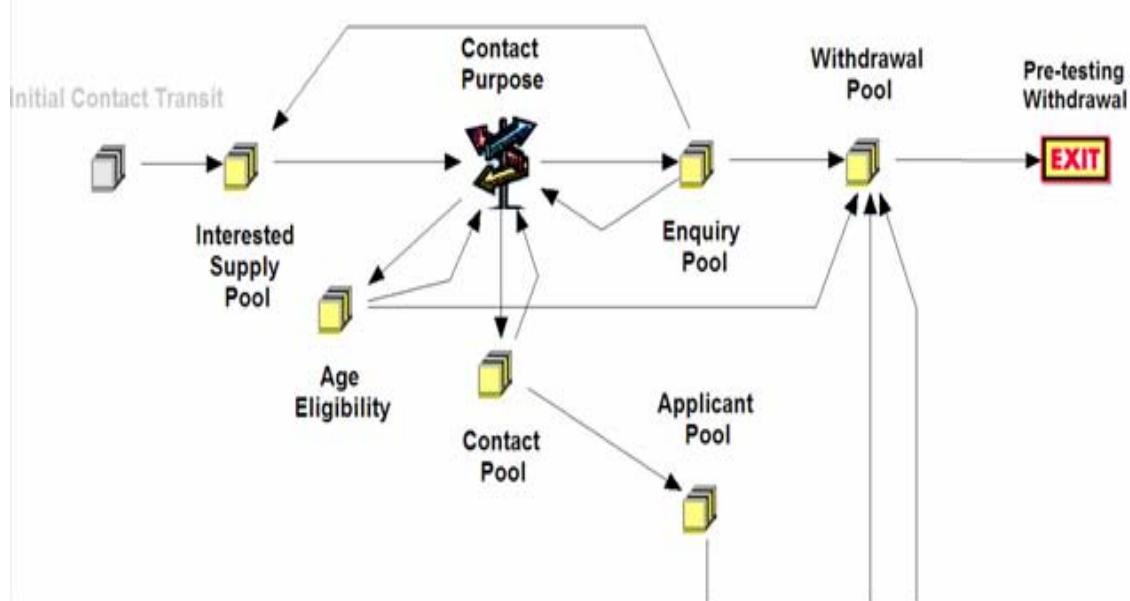
Figure 11.   Process 1: Event 1—Contact Purpose

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[17] "Recruitment and Employment of Members Under 18 Years in the ADF," *Defence Instructions (General) Personnel 33-4*, July 4, 2005, 1.

[18] "Age Limits," *ADF Recruiting Policy 002*, February 20, 2006, 1.

[19] "Arrangements for Service in the ADF," *Defence Instruction (General) Personnel 33-5*, December 6, 2005, 4.

[20] Ibid, 5.

[21] Op cit, "Age Limits," 1.

b.   *Applicant / Enquirer Determination*

The second activity to occur in this event is the division of age eligible interested persons into applicants and enquirers. Enquirers are provided with further information at the time of the contact and advised where they may obtain additional information from other sources. Enquirers are able to contact DFR at a later time and choose to become an applicant by submitting an application. Enquirers who do not re-contact DFR are withdrawn from the RSM and considered to be a system loss from the Initial Contact process. Interested persons who decide to apply for entry into the ADF are categorized as male or female, age eligible applicants and advanced through the RSM to the second event in the Initial Contact process.

2.   **Eligibility Processing**

The input for this event is all male and female applicants of eligible age who wish to submit an application to join the Services. The activities conducted within this event provide DFR with personal information that will determine eligibility for entry into the Services and influence the progression path the applicants will follow in the RSM (see Figure 12).

a.   *Physical Location*

The size and dispersed nature of Australia's population make it difficult to situate DFR branches in locations that are accessible to all applicants without causing excessive financial and resource burdens on the organization. DFR has centers located in each capital city and branches located in several large towns throughout Australia. At each DFR center and branch all five processes within the recruiting system can be conducted, albeit with differing capacity and throughput levels. Applicants are divided into two sub-categories—regional and local applicants—based on their physical proximity to the nearest DFR center (local applicants) or branch (regional applicants). While DFR centers conduct recruiting processing five or six days per week, DFR branches are often only equipped with the personnel resources to conduct recruitment processing once per week or once per month, depending on the branch and the particular process being conducted. This reduction in capacity at DFR branches often increases the system throughput time for regional applicants, i.e., the time taken from process one

"Initial Contact" to process five "Enlistment/Appointment." DFR staff often conduct processing at remote locations where a DFR branch is not permanently located, increasing the throughput of regional applicants. This regularly occurs in areas or locations where a high volume of regional applicants are located but are not viable to maintain a permanent DFR branch, such as Cairns in northern Queensland.
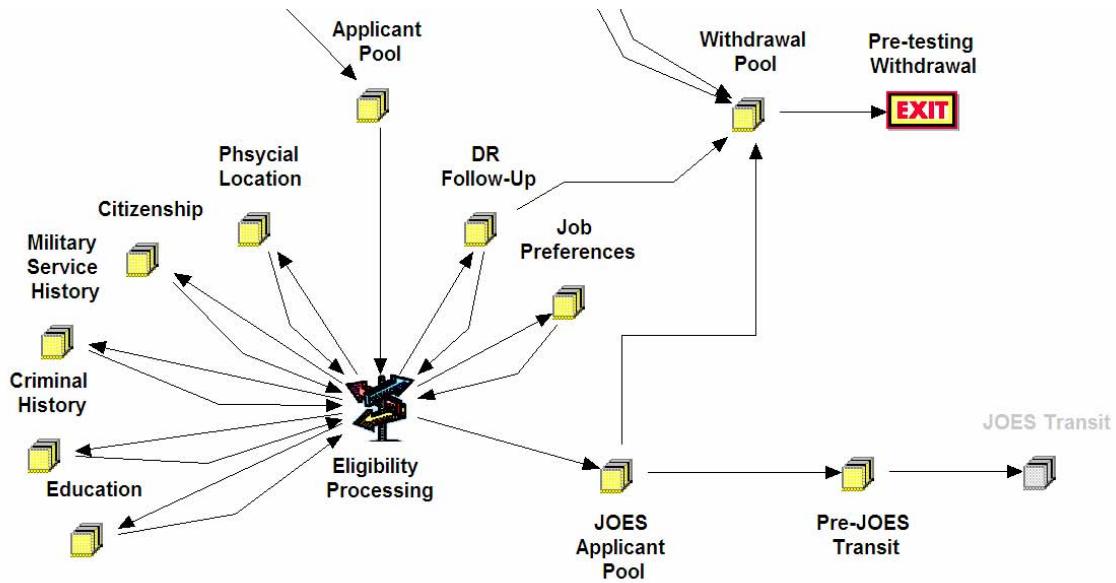
Figure 12.   Process 1: Event 2—Eligibility Processing

b.   *Citizenship*

The second activity in this event is the sub-categorization of applicants into Australian citizens and non-Australian citizens. Australian citizenship is a requirement for entry to and service in the ADF. Non-Australian citizens applying for entry into the ADF must be permanent residents and satisfy normal entry and selection criteria. Non-Australian citizens with permanent residency status are required to apply for Australian citizenship as soon as they are eligible to do so.[22]

c.   *Military Service History*

The third activity in this event is the sub-categorization of applicants into those with previous military service and those without. Before applicants with previous military history can progress in the recruiting system, their previous service documents

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[22] "ADF Policy on Citizenship Requirements for Entry to and Service in the ADF," *Defence Instructions (General) Personnel 33-1*, June 28, 2004, 2.

must be obtained by DFR from the relevant Career Management Agencies (CMA) for individual assessment by medical and psychology staff on eligibility to re-apply for entry into the ADF.[23] This includes applicants who are currently serving or who have previously served in the Armed Forces of another country.[24] The relevant CMA for the applicants' previous Service in the ADF will provide relevant components of the applicants service documents to medical and psychological staff at DFR, with a recommendation whether the application for re-entry is supported.

d.   *Criminal History*

The fourth activity in this event is the sub-categorization of applicants into those with a background of criminal or civil offenses, unacceptable behavior or restrictive circumstances, and those without. The ADF retains the right, under the Defence Act 1903, to select only those people who it believes are suitable for employment. A criminal record or history of unacceptable behavior may indicate an attitude or a lack of self-control that is incompatible with the inherent requirements of service.[25] The inherent requirements for service are covered by *Defence Instructions (General) Personnel 36-3* "Inherent Requirements of Service within the ADF."[26]

e.   *Education*

The fifth activity in this event is the sub-categorization of applicants into those with the minimum education standards required to join the ADF, and those without. Minimum education standards are set by the Services for each job category. Although the applicants have not yet identified the specific job category for which they are interested in, DSC staff are able to provide information to the candidates on any exclusions for entry that may apply to them because of their level of education. Applicants categorized as being without the minimum education standards are those who have disclosed that they have not obtained a minimum of Year Nine education, the lowest level of education accepted for entrance into the ADF.

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[23] "Acceptable Citizenship Status for Entry into the ADF," *ADF DFR Recruiting Policy 001*, October 06, 2004, 2.

[24] "Managing Enquiries from People Serving in Military Forces Other Than the ADF," *ADF Recruiting Policy 052*, September 09, 2003, 1.

[25] "Management of Candidates with a History of Criminal or Civil Offences, Unacceptable Behaviour, or Restrictive Circumstances," *ADF Recruiting Policy 024*, April 11, 2006, 1.

[26] "Inherent Requirements for Service within the ADF," *Defence Instruction (General) Personnel 36-3,* April 03, 2002, 1.

f. DR Follow-Up

Applicants who have been sub-categorized as any of the following are required to speak to a DR before their application for entry into the ADF can be progressed through the recruiting system:

a. Regional applicant

b. Non-Australian citizen applicant

c. Previous military service applicant

d. Criminal background applicant

e. Below minimum education applicant

The DR will discuss with the applicants their unique situation and make an individual assessment as to whether the applicants are eligible and suitable to progress with their application for entry into the ADF. This discussion involves the DR providing the applicants with more information relating to their particular circumstances and the ADF policies that will apply if they choose to continue with their application. The applicants can decide, based on this knowledge, to withdraw from the recruiting system of their own choice. The DR can withdraw the applicants from the recruiting system if the DR feels that their particular circumstances provide grounds for automatic rejection of their application based on ADF and DFR policies on citizenship or criminal background.[27]

The DR can elect to allow the applicants to continue with their application for entry into the Services if the DR feels that their particular circumstances may entitle them to be considered for a waiver for failing to meet entrance standards based on the ADF policy as laid out in *Defence Instructions (Army) Personnel 217-6*.[28] Regional applicants who have not been sub-categorized as having citizenship, criminal background, or minimum education issues, and applicants the DR has elected to allow the continuation of their application despite citizenship, criminal background, or minimum education issues continue through to activity seven in this event under the coordination of a DR. Applicants withdrawn from the RSM at this activity are a system loss from the Initial Contact process.

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[27] Op cit, "Management of Candidates with a History of Criminal or Civil Offences, Unacceptable Behaviour, or Restrictive Circumstances," 5.

[28] "Waivers of Entry Requirements and Provisional Entry," *Defence Instructions (Army) Personnel 217-6*, December 20, 2005, 2.

g.   *Job Preferences*

The seventh activity in this event is the applicants' selection of their three preferred job positions for entry into the ADF. The job positions that applicants select determine their progression through the remainder of the recruiting system and influence the timeliness in which their application is processed. Applicants with job positions in high demand by the ADF will be advanced through the recruiting system ahead of other applicants. Applicants who selected only full-time avenues of entry into the ADF are transformed into job-specific, male or female, JOES-ready applicants with an identifier for any issues raised as to their eligibility for entry and are an output of the Initial Contact process, advancing through the RSM to the JOES process.

h.   *Information Session*

Applicants who selected any part-time avenues of entry into the ADF are required to attend an Information Session conducted by a local Reserve unit. Applicants can also elect to attend an Information Session even if they selected a full-time avenue of entry into the ADF, although their attendance at an Information Session is not required for advancement through the recruiting system. Part-time avenue of entry applicants who fail to attend an Information Session, or who attend an Information Session but are judged unsuitable for entry by ADF personnel at the Reserve unit, are withdrawn from the RSM and are a system loss from the Initial Contact process. Applicants judged suitable for entry by ADF personnel at the Reserve unit are transformed into job-specific, male or female, JOES-ready applicants with an identifier for any issues raised as to their eligibility for entry and are an output of the Initial Contact process, progressing through the RSM to the JOES process.

B.   ISSUES

The losses from the Initial Contact process are the largest of any in the RSM. In Financial Year (FY) 1990–91 the ADF received a total of 231,759 enquiries and only 40,764 formal applications, an 82.4% reduction. In FY 2003–04 there were 83,968 enquiries received by DFR and only 15,957 formal applications, an 81% reduction.[29] Formal applications are considered to be applicants who advanced through the Initial

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[29] Op cit, "Current Workforce Supply Pressures."

Contact process to the JOES process. It is important to note that the recording methods for enquiries changed in the intervening years between 1990 and 2003 and this has an immeasurable impact on the total numbers reported. Even allowing for this reporting difference the decrease in total enquiries received and formal applications submitted raises several issues for the ADF. Without sufficient supply of interested persons into the recruiting system it is impossible to achieve the enlistment and appointment recruiting goals necessary to meet ADF workforce demand, regardless of the recruiting system capacity. Understanding the reasons behind the decline in supply of interested persons, and using the RSM to identify the cause behind losses during the Initial Contact process, can aid managers in developing courses of action that will address these two concerns and improve DFR processing throughput by taking into consideration the resources that are involved in the Initial Contact process and the process capacity limitations that these resource constraints impose.

1. Reduction in Initial Supply

In upcoming years Australia's demographic trends will have an unprecedented impact on the external labor market's capacity to satisfy Defence recruiting needs. The major effects are aging of the Australian population, falling labor market participation rates, and increasing wage pressures. Although the population of Australia is expected to grow from 19.7 million in 2002 to 25 million in 2051, the growth rate is expected to fall from 1.2% to 0.1% over the same period. By 2030, the natural growth rate will be negative; by 2014, the 17–24 year-old segment will begin to decline.[30] This segment is the targeted population of Defence recruiting marketing efforts. The current labor market participation rate is falling as the combined result of several factors. More females are being employed in the workforce at the expense of male employment. The part-time and casual employment sectors are increasing. While the labor market participation rate is falling there have been nearly one million new jobs created in Australia over the last five years, mainly due to global labor market influences.[31] Simple economics theory dictates

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[30] "3222.0 Population Projections, Australia, 2004 – 2101," Australian Bureau of Statistics, June 14, 2006, 38.

[31] Op cit, "Current Workforce Supply Pressures."

that when employment supply decreases and employment demand increases the result is an increasing wage rate. Defence is struggling in this rapidly changing labor market to offer competitive wage rates.

The operational tempo of the ADF is at a level not seen since participation in the Vietnam War over 30 years ago. Whether it is the military's continual involvement with East Timor since 1998 or with the War on Terror since 2001, the ADF has had significant levels of troops deployed on operations around the world for the past eight years. This international presence has an impact on the supply of interested persons. For "non-rejectors" of an ADF career (those persons who are positively disposed toward a career in the ADF) this operational tempo has a positive influence. For the remainder of the targeted population the operational tempo has a negative influence as traditional influencers such as parents and teachers steer youth toward other career opportunities. When considered together with the demographic trends affecting the labor market, the ADF is slowly losing its status as an employer of choice among the targeted youth population segment, reducing the supply of interested persons into the Initial Contact process in the recruiting system.

2.   Losses from Initial Contact Process

Losses from the Initial Contact process can be divided into two categories: losses the DFR can control and losses they cannot control. As policies establishing entrance standards are set by Defence and not DFR, losses from the Initial Contact process due to an applicant's failure to meet entrance standards are considered by this author to be outside of the control of DFR and under the control of the DoD. These losses must still be understood so that the effect that policy changes may have on reducing or increasing Initial Contact losses is taken into consideration, and will be addressed in turn.

Net Overseas Migration has been steadily increasing in Australia, making up more than 50% of the population growth.[32] On average less than one third of overseas migrants apply for and receive permanent residency status. The rising percentage of the population that does not hold Australian citizenship or permanent residency status is

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[32] Op cit, "3222.0 Population Projections, Australia, 2004 – 2101," 4.

increasing the losses occurring from the Initial Contact process because applicants fail to meet the ADF policy on citizenship requirements for entry into the military.

The number of permanent and active Reserve personnel who separate from the military fluctuates, but on average is between 7,000 and 11,000 each year.[33] Given that this number is often equal to or greater than the amount of ab initio recruitment into the ADF, growing the ADF workforce is a difficult task. An increasing number of these separations are for physical injury or illness, psychological illness, disciplinary, or administrative reasons.[34] It is reasonable to assume that discharge from the military for these reasons would preclude subsequent recommendation by the Service authorities for re-entry into the military. Losses from applicants with previous military service that are not recommended for re-entry are increasing.

When an applicant admits to having a criminal record or discloses previous behavior that is unacceptable to inherent requirements of the ADF, the DR relies on *DFR Recruiting Policy 024* "Managing Management of Candidates with a History of Criminal or Civil Offences, Unacceptable Behavior, or Restrictive Circumstances" in order to assess whether the applicant can be further considered for entry into the ADF. Withdrawal by the DR because the applicant does not meet ADF entrance standards due to a criminal background is a significant cause of losses from the Initial Contact process. Automatic grounds for rejection include:

    a.   the applicant is subject to a good behavior bond that restricts him or her from providing unrestricted service;

    b.   the applicant has outstanding legal issues;

    c.   the applicant admits to ongoing habitual drug involvement;

    d.   the applicant is found to have an addiction to habitual drug involvement;

    e.   the applicant has a conviction that is not a spent conviction for the use of or possession of an illegal drug, or of trafficking in any restricted or prohibited drug;

    f.   the applicant has a conviction that is not spent resulting in detention;

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[33] "House of Representatives Notice Paper Question No 2777," February 10, 2004, http;//intranet.defence.gov.au/cap/questions/40th/house/2501-2000/H2777.htm, accessed March 31, 2006.

[34] Ibid.

g.   the applicant has a conviction that is not spent for offenses against a person such as assault, sexual and domestic violence offenses, and any offense against a minor;

h.   the applicant has a conviction that is not spent in relation to offenses such as theft and/or damage to property;

i.   the applicant presents with a history of multiple offenses; or

j.   the applicant presents with a history of multiple alcohol-related offenses.

Various research reports conducted by the Australian Institute of Criminology have shown that juvenile (aged 10–17 years) and youth (aged 14–18 years) detention rates have declined over the past decade. Juvenile offender rates have also decreased during this time period.[35] This can be assumed to have a negative effect on the number of applicants applying for entry into the ADF with a criminal background. Despite decreasing juvenile and youth detention rates, instances of illicit and legal drug use have increased among the juvenile and youth population.[36] The population prevalence of drug use by youths is shown in Figure 13. Involvement by ADF personnel with prohibited substances is not compatible with an effective and efficient Defence Force. Any applicant who admits to involvement with prohibited substances is advised by the DR that their actions are contrary to the ADF's policy on zero tolerance.[37] The DR makes a notation on the applicants recruiting file, and a psychologist will later make a determination based on the applicant's admitted involvement with prohibited substances as to whether the application for entry into the ADF can continue through the recruiting system, using ADF and DFR policy for guidance. The ADF zero-tolerance policy and its influence on entrance standards is resulting in mounting losses from the Initial Contact process due to admitted prohibited substance use by applicants.

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[35] "Crime and Justice," *Australian Youth Facts and Statistics*, http://www.youthfacts.com.au, accessed July 24, 2006.

[36] Spooner, Catherine, et al, "Structural Determinants of Youth Drug Use," Australian National Council on Drugs, 2001, 36.

[37] "Processing Candidates Who Admit to Involvement with Prohibited Substances," *ADF Recruiting Policy 018*, August 19, 2005, 1.
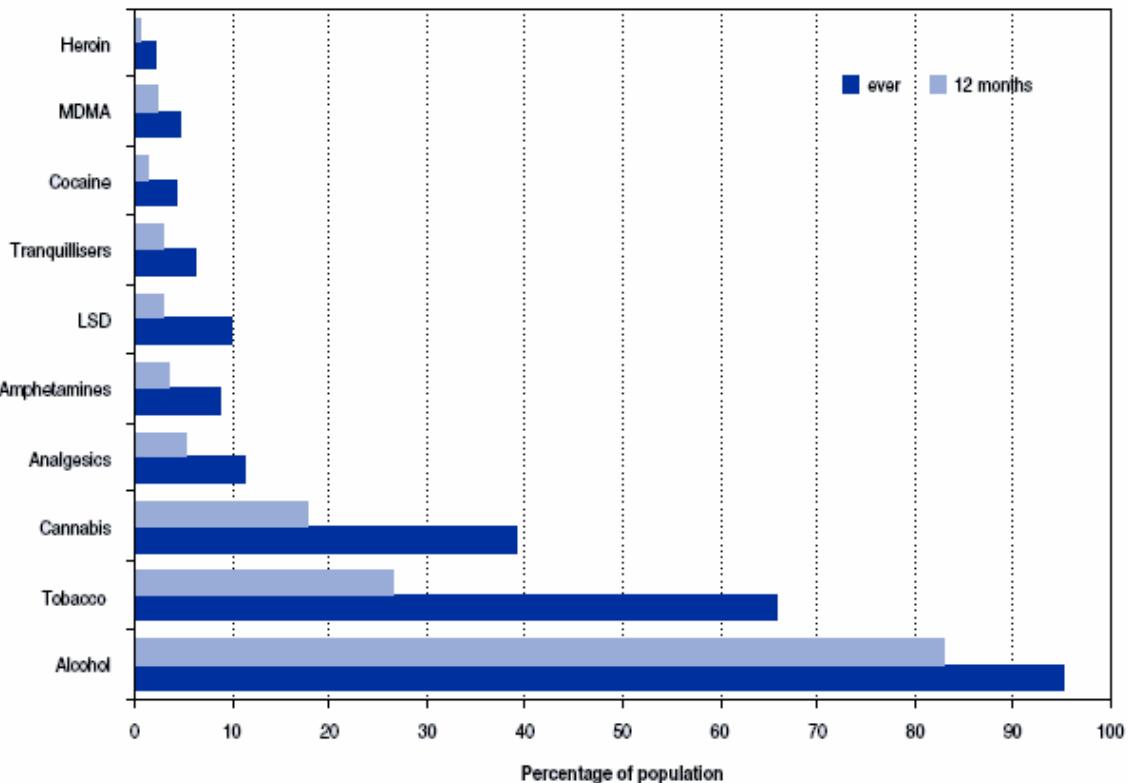
Figure 13.   Youth Prevalence of Drug Use (From: Structural Determinants of Youth Drug Use. Australian National Council on Drugs Research Paper, 2001)

The proportion of 20–24 year-olds with Year 12, Certificate I/II, or higher qualification is 82%. This proportion has steadily increased over the past decade with males and females having similar education levels.[38] The higher level of education qualifications obtained by students is decreasing the number of applicants withdrawn from the recruiting system due to failure to meet minimum education entrance standards.

3.   Resource Constraints

A high volume of interested persons is needed to counteract the considerable losses that occur during the Initial Contact process. The increased use of the Internet, through the introduction of My HQ, a web portal that allows online expressions of interest and submission of applications for entry into the ADF, and the webpage www.defencejobs.gov.au, an online information resource center that provides a wealth of

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[38] "Education," *Australian Youth Facts and Statistics*, http://www.youthfacts.com.au, accessed July 24, 2006.

knowledge on military careers and the recruiting process, should reduce the demand on resources such as DSC staff during the Initial Contact process. No data have been collected or analyzed to date that reviews the impact the introduction of My HQ has had on the demand for DSC staff. Those interested persons who prefer to speak to DSC staff and those who do not have readily accessible access to the Internet will regulate the requirement to provide DSC staff in sufficient quantities to meet this demand. Furthermore, it is difficult to judge an appropriate level of this resource; although some loss can be assumed for interested persons who were not able to speak to DSC staff due to unavailability of this resource, the exact numbers are difficult to calculate.

The increasing number of applicants who require DR Follow-Up (the sixth activity in the second event of the Initial Contact process) due to the same reasons that are causing increasing losses during the Initial Contact process, have amplified the demand placed on this resource. A finite number of DRs are available at any DFR center or branch. DRs are a resource shared among the different processes within the recruiting system and this increased demand from the Initial Contact process reduces the availability of this resource for other activities in other processes.

The ADF Entrant Opinion Survey is conducted every six months on a sample of applicants successfully enlisted or appointed into the ADF during the preceding six months. A consistent finding from these surveys is that the time between the respondent's initial contact with DFR and subsequent Follow-Up by a DR is considered excessive, with more than one third of respondents from each survey conducted identifying this time delay as a major concern of the recruiting system.[39] Given that these surveys have a positive bias because only successfully enlisted or appointed applicants form the survey respondents, it is reasonable to assume that for some applicants this excessive wait is cause for withdrawal from the recruiting system. Increasing the availability of DRs for this activity is difficult without adversely affecting the capacity of other processes that use this resource. Alternative courses of actions such as substituting another resource for DRs in this activity should be considered.

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[39] "The ADF Entrant Opinion Survey: September 2004 – August 2005 Reporting Period," Directorate of Strategic Personnel Planning and Research, DSPPR Report 1/2006, February 2006, 6.

An increasing number of applicants have previous military service, requiring their service records to be obtained from the relevant CMA before their application for re-entry into the military can be processed. This is placing a large exigency upon the CMA to locate these records and provide them to DFR in a timely manner. Excessive delays in the provision of these records, sometimes up to six months, are common. Often applicants are not in a position to continue their application for re-entry into the military while waiting for their service records to be provided to DFR, and withdraw from the recruiting system. Alternative courses of action such as progressing applicants with previous military history through the recruiting system while waiting for their service records to be provided should be considered.

C.　　RELATIONSHIP WITH PROCESS 2: JOES

Figure 2 shows that the Initial Contact process is the first of five sequential processes that make up the recruiting system. The inputs for this process are all interested persons who make contact with DFR either through the online web tools or through the DSC. Losses from the Initial Contact process occur for many reasons and are grouped in the RSM under the title "Pre-testing Withdrawal," (see Figure 6). The outputs from the Initial Contact process become the inputs for the JOES process, the second process in the recruiting system.

IV.   PROCESS TWO—JOES

A.   DESCRIPTION

As the second process in the RSM (see Figure 7), "JOES" has three primary purposes: determining the eligibility of applicants with previous military service, ensuring applicants attend their JOES appointment with the necessary forms and identification, and performing aptitude and initial medical testing to allow preliminary assessment on applicant eligibility for entry into the Services. These three purposes are events in the JOES process, called "Military Record," "JOES Attendance," and "JOES Testing" in the RSM. Each event has several activities conducted within it that transform the inputs into outputs by using DFR resources and following DFR policies. The first and second events are shown in Figure 14.
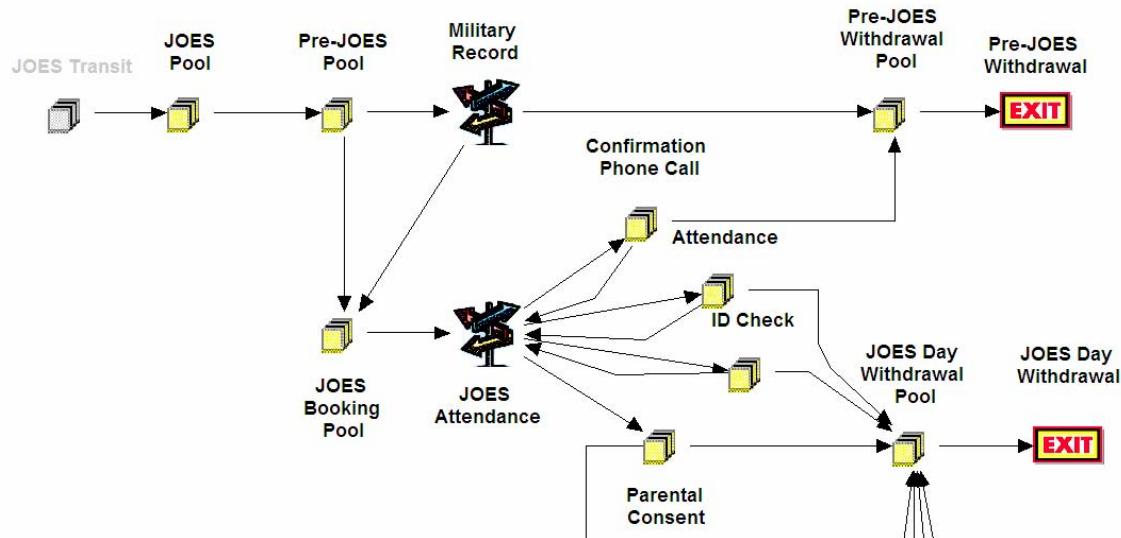
Figure 14.   Process 2: Event 1 and 2—Military Record and JOES Attendance

1.   Military Record

The only activity in this event is the sub-categorization of applicants into groups with previous military service and groups without. Before an applicant with previous military history can progress in the recruiting system, portions of the applicants previous service documents must be obtained by medical and psychological DFR staff from the relevant CMA for individual assessment on eligibility to reapply for entry into the

ADF.[40] This includes applicants who are currently serving, or who have previously served, in the Armed Forces of another country.[41] The relevant CMA for the applicant's previous service will provide the relevant components of the applicant's previous service documents with a recommendation of whether the application for re-entry is supported. Applicants whose previous military service records indicate they are not approved for consideration for re-entry into the military are withdrawn from the recruiting system. Applicants who are approved by the relevant CMA join those applicants without previous military service and have an appointment booking made for attendance at JOES.

2.   JOES Attendance

The input for this event is equal to the output from the Initial Contact process, minus any applicants who withdrew from the recruiting system of their own accord; or applicants with previous military service who were withdrawn from the recruiting system because their reapplication was not recommended by the relevant CMA. The activities conducted within this event ensure that the applicants who present to their JOES appointment are legally authorized to submit an application for entry into the Armed Services.

a.   *Confirmation Phone Call*

The first activity in this event occurs several days prior to the JOES appointment when the JOES Day Coordinator contacts the applicants booked in for JOES. The purpose of the call is to confirm the applicant's upcoming attendance, to ensure the applicant is prepared for the events and activities of the JOES process, and to ensure the applicant has the necessary paperwork prepared. The JOES Day Coordinator can rebook the applicant for an alternative JOES appearance if the original booking date no longer suits the applicant or if the applicant is not suitably prepared applicants are required to bring several items of importance; these include a MHQ, proof of identification, parental consent (if applicable), evidence of all education qualifications obtained, and completed ADF application form. Applicants have the opportunity to

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[40] "Acceptable Citizenship Status for Entry into the ADF," *ADF DFR Recruiting Policy 001*, October 06, 2004, 2.

[41] "Managing Enquiries from People Serving in Military Forces Other Than the ADF," *ADF Recruiting Policy 052*, September 09, 2003, 1.

notify the JOES Day Coordinator if they are no longer interested in pursuing a military career, and they can be withdrawn from the recruiting system if they desire.

b.   *Attendance*

The second activity in this event occurs when the receptionist records the applicants' attendance or non-attendance. The receptionist collects from the applicants all paperwork relevant to their application to join the military and makes copies for the applicants' recruiting files. The JOES Day Coordinator contacts all applicants who did not attend their JOES appointment and either re-books the applicants for an alternative JOES date or withdraws them from the recruiting system.

c.   *Identification Check*

The receptionist takes a digital photograph of each applicant and attaches it to the recruiting file. Applicants are required to provide a full birth certificate as proof of identity, an extract is not sufficient. A certified true copy of the applicant's birth certificate is acceptable. If applicants indicate they cannot fulfill this requirement, an Australian passport or a certificate of Australian citizenship are considered acceptable alternative forms of identification—providing the applicants have completed a Statutory Declaration explaining why they cannot produce their birth certificate.[42] If applicants cannot provide acceptable identification, in English, [43] the receptionist withdraws them from the recruiting system. This requirement for a full birth certificate has existed only since 2002. In years prior, various levels of identification such as birth extracts or Statutory Declarations would have sufficed. The change in policy resulted from changes in the identification required for issue of an Official Australian Passport, necessary for all members of the military.

d.   *Parental Consent*

All minors must have written consent of their parent or guardian to join the military before their enlistment or appointment.[44] Applicants who appear at their JOES appointment without this written consent are not permitted to continue in the

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[42] "Army Induction Management Process," *Defence Instructions (Army) Personnel 116-6*, February 21, 2002, 3.

[43] "Candidate Identification," *ADF Recruiting Policy 009*, October 26, 2004, 1.

[44] "Recruitment and Employment of Members Under 18 Years in the ADF," *Defence Instructions (General) Personnel 33-4,* July 4, 2005, 1.

recruiting system. Applicants are given the opportunity to rebook to an alternative JOES appointment if they can return with written consent of their parent or guardian to join the Armed Forces; otherwise, they are withdrawn from the recruiting system by the receptionist.

3. JOES Testing

An applicant's desire to join the military must be matched by the applicant's physical and mental capability to perform the tasks and duties required by the Armed Services. The activities in this event, "Joes Testing", identify those applicants who do not meet the base level of physical and mental capability required of all military personnel (see Figure 15). Applicants who do not meet the base levels are withdrawn from the recruiting system and considered a loss from the JOES process. As the output of the JOES process is the input for the third process in the recruiting system—Assessment—any loss from this process has a negative effect on the possible throughput of subsequent processes within the recruiting system.
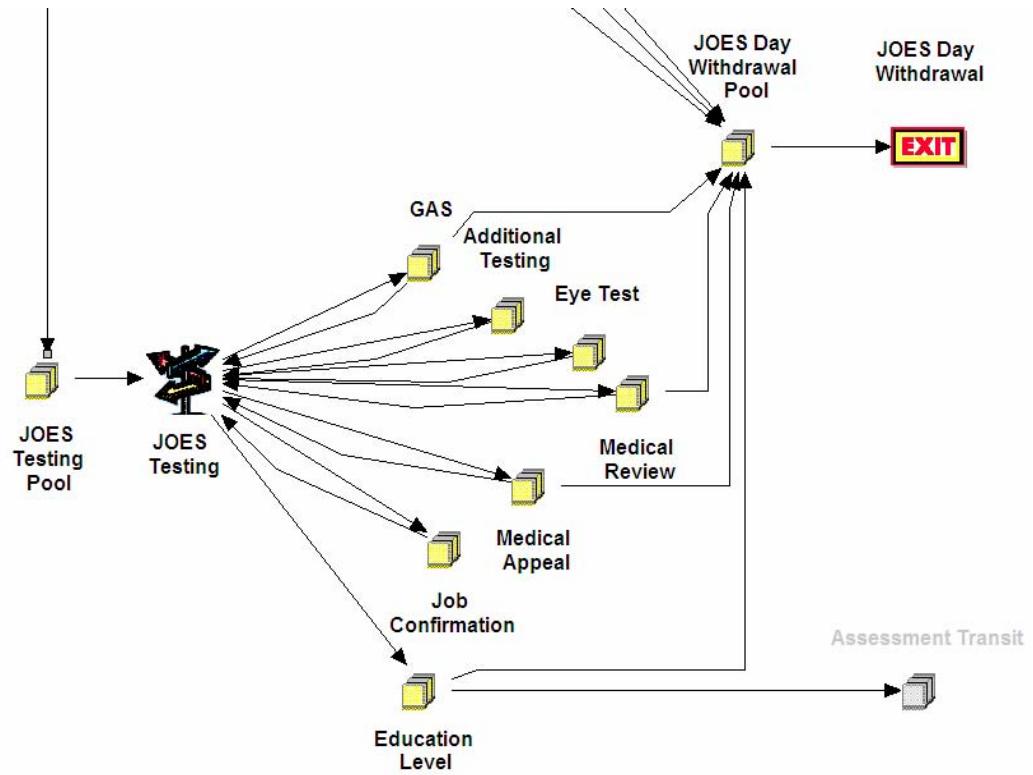
Figure 15.   Process 2: Event 3—JOES Testing

a.   *GAS*

The first activity in the JOES Testing event is to conduct the Army General Classification (AGC) test, overseen by DFR psychology staff. Each applicant attempts the AGC test and receives a GAS. This is a standardized measure calculated from the number of responses answered correctly on the AGC test.[45] According to Chapter 4, Part 4, of PSYMAN, the AGC is a 100-item test, that "was designed to provide gross discrimination, in terms of general reasoning ability, among 'normal' adults across the entire ability spectrum." Applicants receive a GAS, dependent on their performance on the AGC Test, ranging from 1 (the lowest possible GAS) to 19 (the highest possible GAS). Different employment categories within the ADF are allocated different minimum GAS requirements as follows:

    a.   General Entry—Non Technical: GAS 5

    b.   General Entry—Technical: GAS 8

[45] Moss, Andrew, "Success or Failure: An Analysis of Recruiting Measures and Recruit Training Outcome," Defence Force Psychology Organisation, July 2005, 4.

c.   Special Forces Entry: GAS 10

d.   Officer Entry: GAS 12

A waiver system allows applicants who have not obtained the necessary GAS for their preferred avenue to entry to still be considered. To waive an ADF-defined entry standard is to voluntarily surrender or relinquish the requirement of a candidate to meet the standard for enlistment or appointment. Under exceptional circumstances, applicants who do not meet these standards may be accepted – if there are insufficient applicants to meet Service needs, and/or the issue under consideration is considered insignificant or of an isolated nature[46]. Applicants are advised if they will require a waiver in order to be successful in their application, and that the waiver will be considered after the completion of all events that form the Assessment process.

b.   *Additional Testing*

Certain job positions in the ADF require applicants to undertake specialist testing in addition to the AGC test. The testing occurs after the initial psychometric testing (the AGC test) on the JOES day, or via an appointment at a later date. Examples of these tests include clerical testing for pay clerks, technical testing for mechanics and combat engineers, and specialist testing for pilots and military police. The additional testing is also overseen by DFR psychology staff.

c.   *Eye Test*

The third activity in the JOES Testing event is a vision test. Applicants have their vision tested by a NO without the use of any visual aids such as glasses or contact lenses. Applicants also have their color perception tested. Different job categories in the ADF have various minimum standards of visual acuity, the most stringent of which are for the Pilot job categories.

d.   *Medical Review*

The fourth activity in this event is the Initial Medical Examination, which involves a review of the applicant's medical history, as detailed in the MHQ. The MHQ is a series of questions concerning the applicant's past and present medical history. A NO will review the MHQ provided by the applicant. At the end of the interview, a NO will classify the applicant as one of the following:

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[46] "Authority to Grant Waivers," *ADF Recruiting Policy 020*, January 11, 2006, 1.

a. Suitable for further medical and psychological testing

b. Suitable pending the provision of further reports and Medical Officer (MO) confirmation

c. Unsuitable due to failing to meet entry medical standards pending MO confirmation.[47]

Applicants classified by a NO as suitable pending the provision of further reports must provide such reports from their personal physician or personal specialist as required by DFR so that they can be reviewed in depth by a MO. If the applicant chooses not to provide these reports they are withdrawn from the recruiting system. It is the responsibility of the applicant to bear the costs of these additional reports. Following receipt of these reports, the applicant's MHQ is reviewed by a MO and is medically classified as either suitable for further medical and psychological testing or unsuitable due to failing to meet entrance medical standards.

When a NO classifies an applicant as unsuitable due to failing to meet entry medical standards, the applicant's MHQ and any supporting documentation is reviewed by a MO. If a MO confirms the applicant is medically unfit for entry into the military, the applicant is medically classified as Medical Examination Class (MEC) 4Q. Applicants are informed verbally and in writing of their MEC 4 status and the reason for rejection from further consideration in the recruiting system. MEC 4 indicates an applicant is medically unfit for a specific occupation or military service. To be classified as MEC 4 the medical condition(s) must be considered to be permanent, or not likely to resolve within 12 months.[48]

e. *Medical Appeal*

Any applicant who is medically classified as Class 4 may appeal that decision. Applicants who choose not to appeal their medical Class 4 classification are withdrawn from the recruiting system and are a loss from the JOES process. Applicants who appeal their medical classification must submit a written request for reconsideration of the medical classification. Successful appeals require the provision of new medical

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[47] "Health Standards for Entry and Transfer," *Australian Defence Force Publication 1.2.1.1*, March 2005, 103.

[48] Op cit, "Health Standards for Entry and Transfer," 28.

evidence indicating that the condition is no longer evident and the risk of recurrence is low, evidence that the original assessment was based on an incorrect diagnosis, or evidence that the standards have been inappropriately applied.[49]   Applicants who are successful in their appeal are permitted to continue with their application to join the military.   Applicants who are unsuccessful in their appeal are withdrawn from the recruiting system.

f.   *Job Confirmation*

Although the applicants choose up to three job categories for entry into the ADF it is not assured that these job categories are available to them. During the sixth activity in this event, the applicant confirms his or her job category preferences based on the initial choices (which take into account the applicant's age, gender, and education) and their GAS, additional or specialist testing and visual examination results. The DR then counsels the applicants as to which job categories match their characteristics. The DR also provides information on the availability of job categories that have enlistment or appointment opportunities within the next six months. Applicants, on the advice of a DR, may choose to elect a job category as one of the preferences for which they do not meet the entry standards. This will occur where the DR feels that the applicants have mitigating circumstances that may make them eligible for a waiver of those entry standards that they do not meet. Applicants who have a job category as their first preference that does not have any enlistment or appointment opportunities within six months may elect to withdraw from the recruiting system.

g.   *Education Level*

The final activity in this event is confirming that the applicant has the necessary minimum education level. Minimum education standards are set by each Service for each job position. The applicant must provide evidence that they have the minimum education required for their job position preferences. Applicants with overseas qualifications are responsible for providing proof of Australian equivalency. Where an applicant has education qualifications other than those attained through the mainstream State and Territory education authorities (e.g., TAFE bridging courses and home schooling), the onus is on the applicant to prove equivalence with the ADF minimum

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[49] Op cit, "Health Standards for Entry and Transfer," 32.

entry standards. This is usually achieved by attaining a declaration of the equivalence from the relevant education authority.[50]

It is acceptable for applicants to fall short of the minimum education qualification (such as the completion of year nine education for some General Entry job categories) if they have achieved higher non-education qualifications or have TAFE/trade/university studies that equate to or exceed the minimum Service requirements. The Senior Military Recruiting Officer (SRMO) may, on the advice of a DR, recommend an education waiver based on consideration of the applicant's full education, training, study and experience. Applicants who are unable to prove they meet the minimum education standards and who are not recommended by the DR for an education waiver (or if recommended by the DR not approved by the SRMO for an education waiver) are withdrawn from the recruiting system and are a loss from the JOES process.

B. ISSUES

The recruiting system is a funnel system—a large input at the front end of the system is reduced to a small output at the back end of the system through a series of processes that progressively reduce the amount of applicant throughput. The process capacities are limited by the resources available, and each process has a maximum throughput capability. Excessive losses in preceding processes will mean that subsequent processes have a throughput that is lower than the maximum possible—an ineffective system. The ideal recruiting system would have excess applicants at the final process so that the applicants selected for enlistment or appointment are those who are deemed most competitive in the recruiting system, when measured against all applicants who meet minimum entrance standards. When there is a shortage of applicants at the final process due to losses in preceding processes, it means that those applicants selected for enlistment or appointment may have met the minimum entrance standards by a slim margin and may not be extremely competitive. A state of excess, rather than a state of shortage, is

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[50] "Educational Entry Standards," *ADF Recruiting Policy 007*, February 24, 2005, 1.

preferred for the recruiting system. It is important to understand the losses occurring in the early stages of the recruiting system because it is vital that these are addressed in priority.

1.   Previous Military Service Losses

An increasing number of applicants have previous military service, requiring components of their service records to be obtained from the relevant CMA before their application for re-entry into the military can be processed. This places a large exigency upon the CMAs to locate these records and provide them to the appropriate medical and psychology staff at DFR in a timely manner. Excessive delays in the provision of these records, sometimes up to six months, are common. Often, applicants are not in a position to continue their application for re-entry into the military, while waiting for their service records to be provided to DFR and withdraw from the recruiting system. Alternative courses of actions should be considered, such as allowing applicants with previous military history to advance through the recruiting system while waiting for their service records to be obtained from the relevant CMA.

The number of permanent personnel and active Reserve personnel who separate from the military fluctuates each year, but on average is between 7,000 and 11,000.[51] Given that this number is often equal to, or greater than, the amount of ab initio recruitment into the ADF, growing the ADF workforce is a difficult task. An increasing number of these separations are for physical injury or illness, psychological illness, disciplinary, or administrative reasons.[52] It is reasonable to assume that discharge from the military for these reasons would preclude subsequent recommendation by the Service authorities for re-entry into the military. Losses from applicants with previous military service, who are not recommended for re-entry, are increasing.

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[51] "House of Representatives Notice Paper Question No 2777," February 10, 2004, http;//intranet.defence.gov.au/cap/questions/40th/house/2501-2000/H2777.htm, accessed March 31, 2006.

[52] Ibid.

2. Failure to Prove Losses

The onus is on the applicants to prove to DFR that the information they include in their application for entry is true and correct. Often, this can be an expensive undertaking for the applicants, with no assurances they will receive a job offer at the end of the recruiting process. Losses from the recruiting system occur when the applicant is unable to, or decides not to, prove the statements made on the application concerning medical history, identification, or education.

The change in the policy dictating identification requirements has affected many applicants who do not have immediate access to their full birth certificate and/or do not possess the financial means to obtain a copy from the State Authorities. Furthermore, the change in policy has affected the name by which applicants are enlisted or appointed into the military. A deed poll is no longer acceptable evidence of a change in name for applicants. Applicants must provide written evidence, in the form of documentation from the Register of Births, Deaths, and Marriages that a change of name has been registered, if they wish to be enlisted or appointed by a name that varies from that recorded on the birth certificate. The number of formally registered marriages has declined in Australia since 1982, with the divorce rate among those formally registered marriages increasing during the same period.[53] An increasing number of Australians are known by surnames that differ from that on their birth certificate due to their particular family situation. This affects the ability of applicants to prove their identity and in some cases the ability to prove education levels and other personal information. It is reasonable to assume the change in policy relating to identification requirements increases the occurrences of applicant withdrawal from this event of the JOES process. However, given that identification requirements are rapidly changing for other organizations in Australia, such as schools and employment industries, this effect should only be in the short term.

3. Education

Aside from the losses occurring when applicants fail to prove they have obtained the minimum education level required for their preferred avenue of entry, losses also

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[53] "3310.0 Marriages and Divorces —Australia 2002," Australian Bureau of Statistics, November 26, 2003, 27.

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occur when the applicants simply do not have the minimum education level necessary. The majority of non-technical general entry job categories require a minimum education of Year 9. For technical general entry job categories the minimum education level is usually Year 10. For officer entry job categories the minimum education level is usually Year 12. A survey of education and training (SET) was conducted by the Australian Bureau of Statistics in 2005. The SET was a household survey conducted in both urban and rural areas in all states and territories and had a sample size of 27,600. Of the survey population aged 15 years and over in 2005, 31% reported Year 10 or below (or its equivalent) as their level of highest educational attainment, and 23% reported Year 11 or Year 12 as their highest educational attainment. An additional 18% had a Bachelor Degree or higher level qualification, and 16% had a Certificate III or IV.[54]

The average level of education attainment has been steadily increasing in Australia. In 1984, 48.3% of the population aged 15–69 years did not complete the highest level of secondary school (Year 12).[55] In 1994, this statistic was reduced to 37.8% and, in 2004, only 32.3% of the population had not completed Year 12.[56] The minimum school-leaving age is 15 years in most states of Australia, although legislation is in place for this age to be raised to 16 years (South Australia) and 17 years (Tasmania and Western Australia).[57] Given the starting school age of five years in most states, this means that the majority of students are currently unable to leave school without having completed Year 9 and started Year 10. Even if an applicant does not have Year 12 education, there are still avenues of entry into the military available to them with only Year 9 education. Given the increasing average level of education attainment in Australia, it is reasonable to assume that the losses from the JOES process – due to an applicant's failure to have achieved the minimum education level necessary for entry into the ADF – should decrease.

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[54] "6278.0—Education and Training Experience, Australia 2005," Australian Bureau of Statistics, May 29, 2006, 4.

[55] "4102.0 Australian Social Trends 1995," Australian Bureau of Statistics, July 20, 1995, 67.

[56] "4102.0 Australian Social Trends 2006," Australian Bureau of Statistics, July 20, 2006, 89.

[57] "Secondary Education," *Aussie Educator: A Total Education Webpage for Australia*, http://www.teachers.ash.org.au/aussieed/secondaryeducation.htm, accessed August 06, 2006.

4.   Aptitude Losses

The number of applicants withdrawn from the recruiting system for failing to achieve the necessary GAS for their chosen avenue of entry is significant. Also significant is the number of applicants who fail to achieve the minimum GAS for entry into the ADF and who are subsequently classified as Below the Required Standard (BRS) for all avenues of entry. In 1994, 21.7% of all applicants who applied for a general entry job in the military were classified as BRS; in 2004, only 12.8% of all applicants who applied for a general entry job in the military were classified as BRS.[58] It is reasonable to assume that this decrease is in part due to the introduction of computer-based testing, but is mostly due to the increasing level of educational attainment seen in applicants.

Given that the majority of applicants are well educated when compared with their predecessors, continued high levels of applicant losses from the JOES process – due to failure to achieve the necessary GAS level – is unexpected. It is realistic to assume that not all these applicant failures are due to the applicant not having the necessary aptitude to achieve a higher score on the AGC test. Alternative reasons for the continual comparatively high failure rates should be considered. A suggested reason is that the applicants' are not taking the AGC test with the necessary level of understanding of the scoring method to gain a GAS that is an accurate representation of their aptitude. Unlike Year 12 exams taken by the majority of students in Australia, the AGC test does not have weighted questions, and there are no negative consequences of an incorrect answer. Each of the 100 questions in the AGC test have equal ranking; since the GAS is created by reviewing the total number of questions answered correctly, it makes no difference which of the 100 questions were attempted and answered correctly by the applicant, nor does it matter how many questions the applicant answered incorrectly. Unless applicants are aware of this they may approach the AGC test in a manner that is not conducive to obtaining the highest possible GAS.

By making the applicant aware that each question is equally weighted, that there are no negative consequences of incorrect answers, and the correct manner of approaching the AGC test, it is realistic to expect that applicants will obtain a better GAS

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[58] Goyne, Anne and McNamara, Michelle, "ADF General Entry Selection: Then and Now," *Defence Force Psychology Organisation*, February 2006, 11.

than they would have otherwise. The proper approach to the AGC test is to answer each question in turn as quickly as possible, moving on to the next question immediately if the applicant becomes "stuck" or if the question covers an area in which the applicant is unfamiliar. Rarely does any applicant attempt all 100 questions, yet there may be questions toward the end of the AGC test that the applicants would have answered correctly if they had had the time, therefore increasing the GAS. Applicants who have failed to achieve the necessary GAS for their preferred avenue of entry are informed, by DFR psychology staff, that they can re-attempt the AGC test in six months. Applicants are advised that they should seek further education prior to re-attempting the AGC as this is the only means by which they will significantly increase their GAS. An experiment conducted by this author in 2003 showed that an applicant can significantly increase his GAS, (from GAS 8 to GAS 13 in a six-month period), without seeking further education simply by approaching the AGC test in a different manner. It is conceivable that the losses from the GAS activity in the JOES process could be appreciably reduced if DFR psychology staff prepared applicants for the AGC test in a different manner.

The U.S. military has recently launched "March 2 Success", a free web-based program that makes high quality, test preparation instruction available to anyone with internet access. Designed by Kaplan and Educational Options, and sponsored by the U.S. Army, the March 2 Success program was designed specifically to assist young men and women by providing a comprehensive review of English and Math material as well as instruction in essential problem-solving skills, testing strategy, and basic text mechanics.[59] Administration of drills and practice tests allow participants in the March 2 Success program to identify weaknesses and hone skills prior to sitting for the military aptitude entrance test. The March 2 Success program does not "teach" the military entrance examination, the program teaches basic English and Math skills common to all standardized tests. In addition, the March 2 Success program provides training in test-taking strategies and problem solving skills. The ADF should investigate the feasibility of sponsoring a similar program that could be accessed by all interested persons to aid in

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[59] "Educator FAQ", *March 2 Success*, https://www.march2success.com/educator/ed_faq.cfm, accessed August 12, 2006.

improving the ability of applicants to sit the AGC and obtain a GAS that accurately reflects their aptitude and does not merely reflect their ability to sit an examination.

5.   Medical Losses

Medical fitness is a fundamental requirement for entry to and retention in the ADF, as all members may be called on to perform operational service, often at short notice. To be able to fulfill these duties, personnel are required to undertake, to varying degrees, arduous training during initial entry courses and on an ongoing basis throughout their career. For such physical activities, the highest level of medical fitness is required. Those who cannot meet those standards may jeopardize the safety of others or unfairly necessitate the performance of their duties by others.

The aim of the medical examination of applicants is to determine medical fitness eligibility to serve in the ADF. Many medical conditions may allow an individual being labeled physically fit in terms of their functional capacity in a particular workplace, but that does not equate to the medical fitness needed to meet ADF requirements under operational or training conditions.   This distinction is important when assessing individuals' suitability for Service life. Hence, the medical fitness of applicants for Service must be carefully assessed with a view toward the following key features: functional capacity or disability, potential harsh living conditions, compatibility with specific clothing and equipment, climatic conditions, safety considerations, and the level of medical support required.[60]

The health of Australians can be seen as an indicator to the number of MEC 4 classifications given to applicants in the initial medical examination. Disabilities and core-activity restrictions are long-term consequences of a health condition, impairment, disease, or accident that can have a severe impact on the quality of life of the affected person.[61] The 1998 ABS Survey of Disability, Ageing, and Careers defines *disability* as the presence of one or more of 17 "limitations, restrictions, or impairments" identified by survey respondents. According to this definition, more than 3.6 million people in

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[60] Op cit, "Health Standards for Entry and Transfer," 63.

[61] De Looper, Michael and Bhatia, Kuldeep, "Australian Health Trends 2001," *Australian Institute of Health and Welfare (AIHW)*, Cat. No. PHE 24. Canberra: AIHW, 2001, 19.

Australia recorded a disability in 1998. Although disability is strongly related to age, there were 3.6 million people in Australia in 1998 (18.8 % of the population) who would likely have been classified as MEC 4 if they had applied for entry into the military.

Of greatest concern for the ADF is the prevalence of conditions such as obesity, high blood pressure, high cholesterol, alcoholism, and smoking-induced cancer among the Australian population. Being overweight is a condition characterized by excess body fat and is the result of an imbalance between energy intake and energy expenditure over a long period of time. Overweight and obese people are at increased risk for many diseases and conditions, particularly strokes, heart attacks and vascular disease. They also have a higher risk for developing respiratory and musculoskeletal problems, problems that would be accelerated only by the conditions of, and training involved in, military service. The Australian Diabetes, Obesity, and Lifestyle Study conducted in 1999 by the Australian Diabetes Association found that 65% of males and 45% of females were overweight (classified as having a BMI greater than 25). This is a sharp increase from the 47.6% of males and 26.7% of females found to be overweight in the 1980 National Heart Foundation Risk Factor Prevalence Study.[62] These conditions, and the underlying

lifestyle choices that factor into the development of these conditions and those like them, are likely to render an applicant unsuitable for entry due to failing to meet medical entrance standards.

6.   Resource Constraints
The throughput capacity of the JOES process is limited by the resources involved: DFR staff and facilities. JOES processing occurs at DFR centers six days per week and at DFR branches one to four times per month. The maximum number of applicants who can be seen each day is currently constrained by the number of computers available to conduct the psychometric testing. While increasing the number of psychometric tests that can be conducted at one time will boost the capacity of the JOES process, there is a limit to the space available to conduct this testing. Once the JOES process capacity has been increased by augmenting the amount of testing that can be handled in a single day,

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[62] Op cit, "Australian Health Trends 2001," 79.

the constraining resource would quickly transfer to DFR staff. The psychology personnel who supervise the psychometric testing are also responsible for conducting activities during the Assessment process. Placing more demand on their time during the JOES process will reduce their availability during the Assessment process.

An alternative course of action that should be given serious consideration is enabling applicants to take the AGC test prior to their attendance for the JOES process. DFR staff members frequently have contact with interested persons prior to any formal application for entry into the ADF is lodged at special events such as school visits and show days. Having a notebook computer with the AGC test loaded available at special events such as these would provide interested persons the opportunity to take the AGC test and obtain a GAS. This is easily monitored, providing the DFR staff present has the necessary training to oversee the administration of the AGC test. Although the applicants who take the AGC test at a DFR location during the JOES process are in a controlled environment, and applicants who were to take the AGC test at an alternative location would not be subject to the same environmental conditions, the concept of ad-hoc location aptitude testing should be considered further. This course of action will reduce the quantity of applicants who are classified as BRS at JOES and withdrawn from the recruiting process, thereby increasing the throughput of the JOES process. Knowing their GAS in advance provides applicants more time to consider the job positions they are suited for, reducing instances of applicants continually changing their job preferences as they become more familiar with military career options.

DRs individually counsel each applicant during the JOES process. They are also responsible for conducting DR Follow-Ups in the Initial Contact process and are heavily involved in the applicant's progression through the recruiting system after the Assessment process. Increasing the number of applicants booked to a JOES each day will increase the demand placed on DRs. This increased demand will lengthen the time it takes for the DRs to perform the multitude of activities they are involved in, extending the time an applicant spends in the recruiting system—a key cause for discontent among successfully enlisted and appointed applicants.[63]   MO and NO staff are currently

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[63] "ADF Entrant Opinion Survey: September 2004 – August 2005 Reporting Period," *Directorate of Strategic Personnel, Planning and Research*, DSPPR Report 1/2006, February 2006, 6.

underutilized during the JOES process but they are also involved in the Assessment process where they are a constraining resource. Adjusting the throughput in any manner that increases their utilization in the JOES process will have negative consequences on the throughput of the Assessment process. In order to determine the number of resources that will maximize throughput of the JOES process and the other processes within the recruiting system it is necessary to conduct a detailed process and system analysis.

C.   RELATIONSHIP WITH PROCESS THREE: ASSESSMENT

Figure 2 shows that the JOES process is the second of five sequential processes that make up the recruiting system. The input for this process is equal to the output from the preceding process, Initial Contact. Losses from the JOES process occur for many reasons and are grouped in the RSM under two titles as shown in Figure 7: Pre-JOES Withdrawal (for applicants who do not attend a JOES booking), and JOES Day Withdrawal (for applicants who attended a JOES booking and were found ineligible to continue their application for entry into the military). The output from the JOES process becomes the input for the Assessment process, the third process in the recruiting system.

V.   PROCESS THREE—ASSESSMENT

A.   DESCRIPTION

As the third process in the RSM, shown in Figure 16, "Assessment" serves six purposes: ensuring applicants are prepared for their assessment booking, confirming applicants' attendance at their assessment booking, giving the applicant an initial medical exam, having the applicants' medical status confirmed by a MO, conducting an interview between a psychologist and the applicant, and conducting an interview between a DI and the applicant. These six purposes are events in the Assessment process, sequentially named DR Checklist, Assessment Attendance, Nurse Exam, Doctor Exam, Psychologist Interview and Defence Interview in the RSM. Each event has several activities conducted within, which transform the inputs into outputs by using DFR resources and following DFR policies. The first and second events are shown in Figure 17.
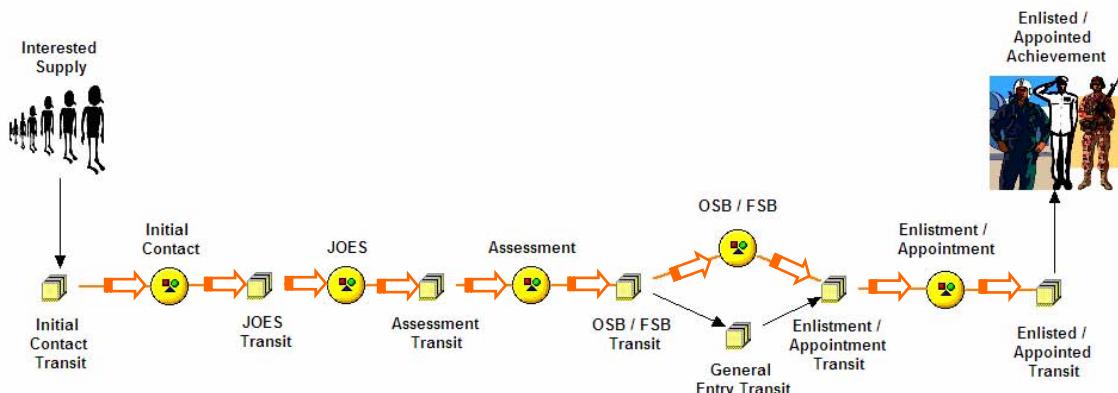
Figure 16.   RSM

1.   DR Checklist

The first activity in this event is the completion of a DR Checklist. Subsequent events in the Assessment process require the applicant to prove to a DI and a psychologist that he or she is making an informed decision to join the Armed Forces. The applicants must show that they are aware of the conditions of service that will apply to their military career (pay, leave, housing, etc.), the requirements of service (deployment, Return of Service Obligation (ROSO), unrestricted service, etc.) and the training involved in their preferred avenue of entry. A DR will contact the applicant at

least one week prior to the assessment booking and ascertain the applicants' level of knowledge. The DR can answer any further questions the applicant has and suggest sources of information available on the Internet. If the DR feels that the applicant is not suitably prepared, and that the applicant will not improve his or her knowledge by the date of the assessment appointment, the DR can recommend the applicant be rebooked to a later assessment date. The applicant has the option to ignore the DR's recommendation and continue with the existing booking or rebook to a future date, allowing time for him or her to prepare for the Assessment process. If the applicant chooses to change the assessment booking to a later date, the DR will contact the applicant again to conduct a second (or third) DR Checklist interview. The applicants also have the opportunity to inform the DR if they have made the decision to discontinue the application process and withdraw from the recruiting system.
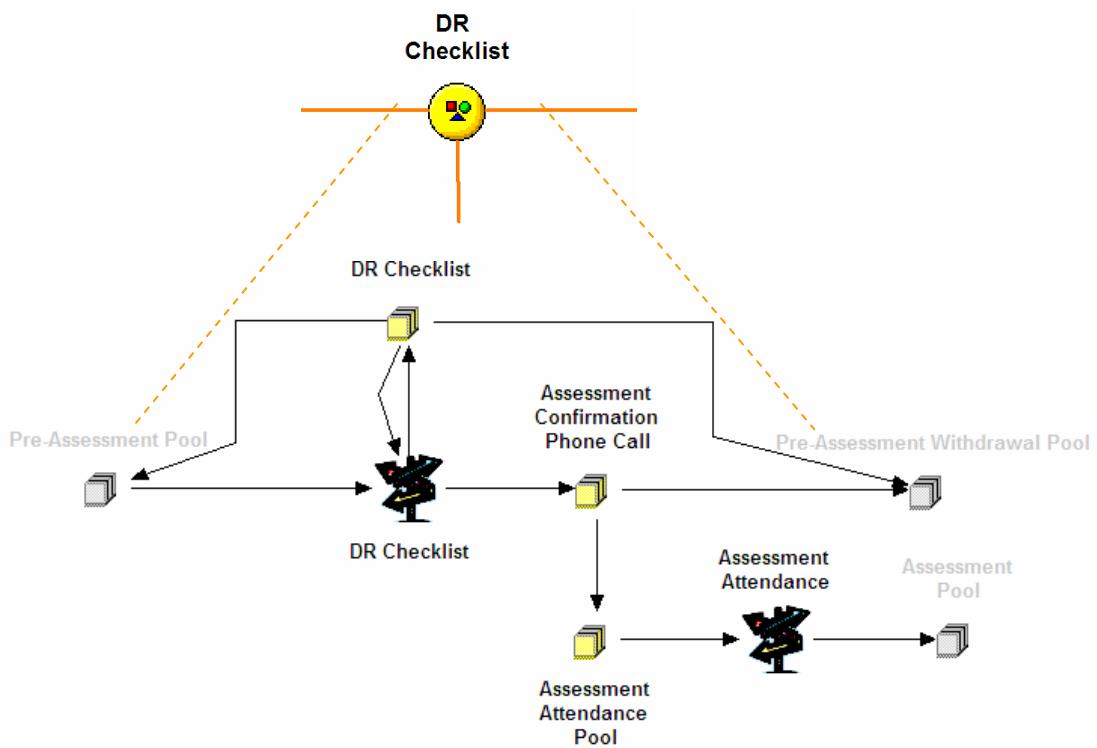
Figure 17. Process 3: Event 1 and 2—DR Checklist and Assessment Attendance

The second activity in this event is the Assessment Day Coordinator contacting the applicants several days prior to their appointment for assessment. The purpose of the

call is to confirm the applicants' upcoming attendance. The Assessment Day Coordinator can rebook the applicant for an alternative assessment appearance if the original booking date is no longer compatible with the applicant's schedule. Applicants have the opportunity to notify the Assessment Day Coordinator if they are no longer interested in pursuing a military career and can be withdrawn from the recruiting system if they desire.

2. Assessment Attendance

The only activity in this event is the Assessment Day Coordinator recording the applicants' attendance or non-attendance at their assessment appointment. The Assessment Day Coordinator contacts all applicants who did not attend their assessment appointment and can either re-book the applicants for an alternative assessment date or withdraw them from the recruiting system.

3. Nurse Exam

Clinical aspects of medical history and examination are divided into two parts. The activities conducted in this event are the first part of the medical assessment and involve the preliminary tests that are performed by appropriately trained staff at DFR under the supervision of a NO. The activities conducted in this event, shown in Figure 18, ensure that a MO has all the necessary information regarding the applicants' health and is in an informed position to conduct a full clinical examination. Applicants can choose to withdraw from the recruiting system during this event but will not have their application withdrawn by DFR staff regardless of the activity outcomes until they have seen a MO.
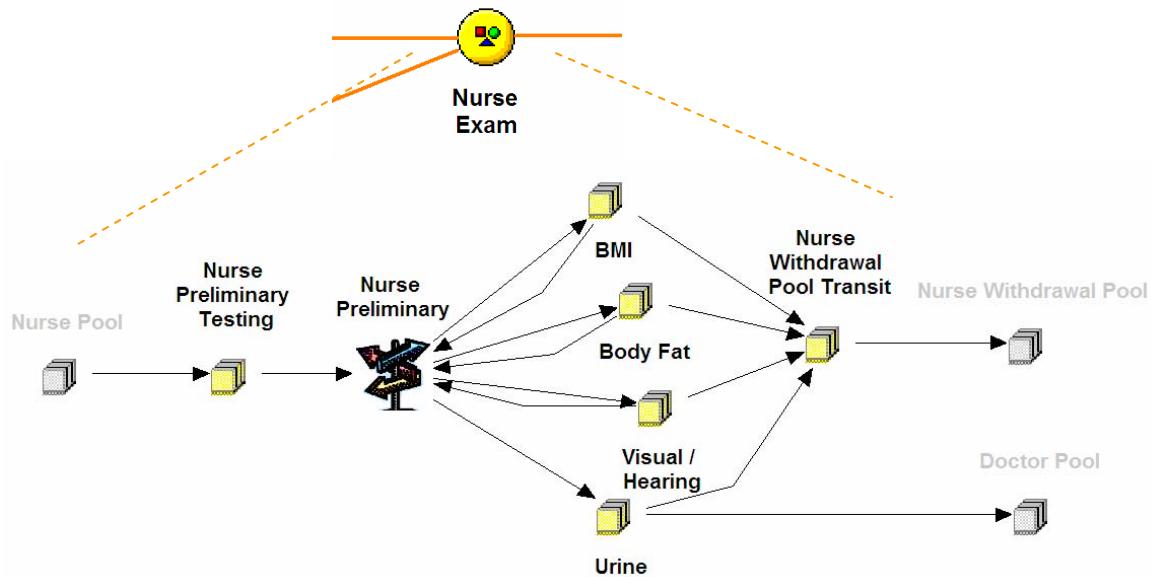
Figure 18.　　　Process 3: Event 3—Nurse Preliminary

a.　BMI

The National Health and Medical Research Council have endorsed the BMI approach to determining an acceptable weight-for-height range for the population. MOs use the BMI as a clinical indicator of conditions such as morbid obesity, anorexia, bulimia, and diabetes. The applicants' height, with their footwear removed, and weight, in underwear only, is recorded to the nearest centimeter and 0.5 kilogram, respectively.[64] The BMI is calculated using a specific formula, weight (in kilograms), divided by height (in meters) squared. Applicants with a BMI less than 18.5 are considered to be underweight but may still be suitable for entry subject to the assessment of a MO. Applicants with a BMI between 18.5 and 24.9 are considered to be in a healthy weight range and suitable for entry. Applicants with a BMI between 25.0 and 29.9 are considered to be overweight but are still suitable for entry. If clinically indicated they may be required to undergo a body fat percentage assessment. Applicants with a BMI between 30 and 32.9 are also considered to be overweight. They may be suitable for entry but are required to undergo a body fat percentage assessment. Applicants with a BMI greater than 33 are considered obese. They are immediately classified by a NO MEC 4, unsuitable for entry into the military. Applicants with a BMI greater than 33

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[64] Op cit, "Heath Standards for Entry and Transfer," 123.

have the opportunity to be reassessed when they reach an acceptable BMI and have maintained the weight loss for more than six months.[65]

The minimum height limit for entry into the ADF is 152 centimeters, without footwear. There is no maximum height restriction for entry into the ADF except for aircrew, which differs depending on the job category. There are no reach restrictions on applicants for entry into the ADF for any job category except for Royal Australian Air Force (RAAF) Fire Fighters. There is no action taken by DFR staff during this activity for applicants who fail to meet height and reach standards for entry into the ADF. Their results are noted on their medical examination form for review by a MO.

b.   *Body Fat*

Those applicants who require a body fat percentage assessment have their measurements taken by a trained DFR staff member or NO. Body fat percentage is measured according to directions laid out in *ADFP 1.2.1.1* "Health Standards for Entry and Transfer", Annex C to Chapter 3. Other techniques for body fat estimation are currently under review. There are no body fat percentage entrance standards that applicants must meet. Body fat percentages are used by MOs in conjunction with other clinical information to determine whether the applicant is in a physical condition conducive to service in the military.

c.   *Visual/Hearing*

The third activity in this event is the administration of tests to determine the visual acuity of the applicant and assign a Minimum Visual Requirement (MVR) score. It is important that military personnel have a base level of visual ability without aids such as glasses or contact lenses. Specific job categories such as Special Forces, aircrew, and personnel who work regularly with explosives require a higher level of visual ability to be considered suitable for entry. Applicants who do not meet the MVR for their preferred job category are informed of their alternative options. Applicants also undergo two tests that screen for color perception (CP) deficiencies. Applicants are categorized according to their color perception ability, which affects the job categories in which they are considered suitable for entry. Applicants given a CP 3 rating are made aware of the job positions that are compatible with their level of color perception and are

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[65] Op cit, "Heath Standards for Entry and Transfer," 214.

given the opportunity to change their job preferences.[66] Applicants are also given an audiometric test in accordance with *Australian Standard/New Zealand Standard 1269.4.1998* "Occupational Noise Management—Auditory Assessment".

d.   Urine

The fourth activity in this event is the delivery of a urine sample by the applicant to a NO. Urinalysis is to be conducted on all applicants, with additional pregnancy testing for all female applicants. Applicants with an abnormal test result are required to consult with their family doctor and provide a health care report to the MO before a final determination on their medical status can be made. Female applicants who record a positive test result on the pregnancy test are advised of the outcome and retested if the applicant requires further evidence of the pregnancy. The urinalysis does not test for drug or substance abuse.

4.   Doctor Exam

Applicants who have completed the preliminary medical testing then have a full clinical examination, known as the Entry Level Medical Examination (ELME) performed by a MO who has the applicant's medical file available for reference. The outcome of the clinical examination is the classification of applicants in terms of their medical suitability to serve in the military and their medical suitability to perform the tasks required of their preferred job category. MOs have a duty of care to inform an applicant if medical or health problems are detected during the medical examination process, as a result of information disclosed in the MHQ, and/or the applicant not meeting preliminary medical standards, and/or the findings of the ELME. The MO is required to provide an explanation of the reason the medical standards are not met at the time the applicant is deemed to be medically unfit. The applicant is given the option to proceed with the medial examination or stop at that point. The applicant is encouraged to complete the ELME for detection of other medical conditions, assessment of medical suitability for alternative job categories, and completeness in the case of an appeal. The activities conducted in this event are shown in Figure 19.

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[66] Op cit, "Heath Standards for Entry and Transfer," 127.
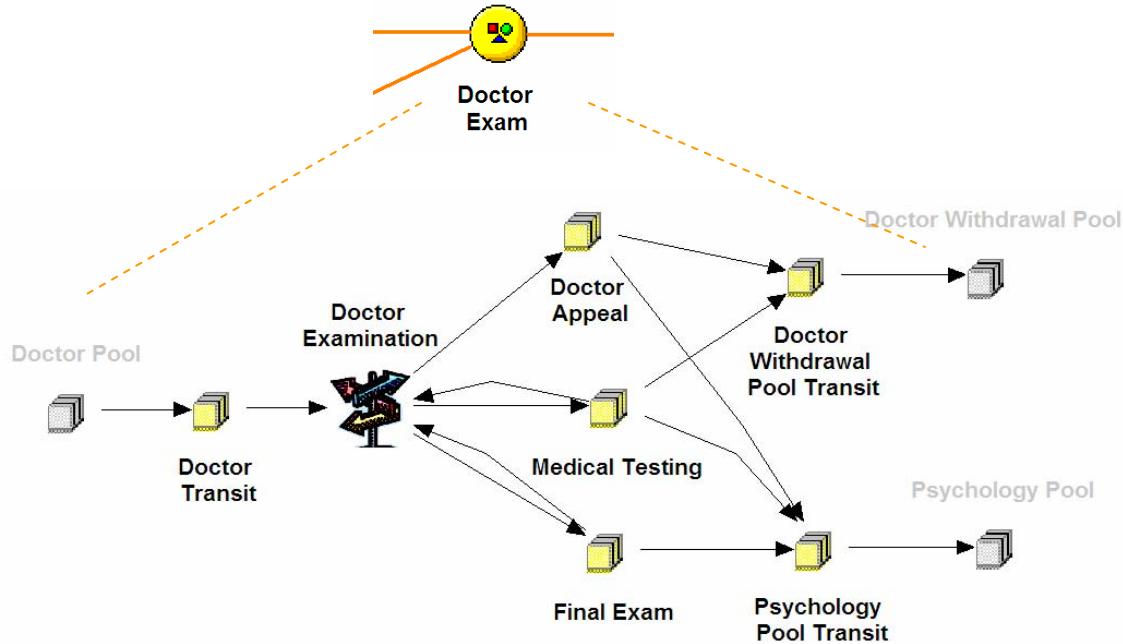
Figure 19.   Process 3: Event 4—Doctor Examination

The first paragraph of *ADFP 1.2.1.1* "Health Standards for Entry and Enlistment" details the essential function performed by the ELME.

> It is an inherent requirement of ADF service that personnel of all ranks are able to contribute fully to the delivery of decisive combat capability in the right place, and at the right time. This means that all members of the ADF must be trained and equipped for service appropriate to their likely tasks, and must be ready and able to deploy at short notice on operations and exercises. They should be capable of meeting a requirement for sudden and unusual deployments, perhaps in roles or environments for which the personnel involved have little or no specific training or preparation. The inherently dangerous nature of tasks the ADF may be called upon to perform, especially in foreign and remote places, impose additional obligations on Service life. Such obligations and the intrinsic dependence Service people have on one another as members of a team, demand that every member of the ADF must be capable of making the fullest contribution to the achievement of Australia's military objectives.
>
> Medical fitness is a fundamental requirement for entry to and retention in the ADF, since all members may be called upon to perform operational service, often at short notice. To be able to fulfill these duties, personnel are required to undertake, to varying degrees, arduous training during initial entry courses and on an ongoing basis throughout their career. For

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such activities, the highest level of medical fitness is required. Those who cannot meet those standards may jeopardize the safety of others or unfairly necessitate the performance of their duties by others.

All members of the ADF must be able to carry out their specialist occupational functions, as well as general military duties, under the arduous physical and mental stresses associated with armed conflict. Military duty often involves lengthy periods under operational conditions in wide extremes of climate, with minimal medical and dental support. In such conditions, sleep and rest periods may be severely curtailed or interrupted, and personnel subjected to excessive noise and other adverse environmental stressors. The aim of the medical examination of applicants is to determine medical fitness to serve in the ADF. There are many medical conditions, which allow individuals to be physically fit in terms of their functional capacity in a particular workplace, but which do not equate to the medical fitness needed to meet ADF requirements under operational or training conditions. This distinction is important when assessing individuals' suitability for Service life. Hence, the medical fitness of applicants for Service must be carefully assessed with a view to the following key features: functional capacity or disability, potential harsh living conditions, compatibility with specific clothing and equipment, climatic conditions, safety considerations, and the level of medical support required.

a. Final Exam

The first action taken by a MO during the conduct of the ELME, the first activity in this event, is a physical inspection of the applicant. Through this physical examination the MO is attempting to gain a general impression of body build and physique, observe evidence of skin disease or other marks and scars that should be recorded, and look for cutaneous evidence of intravenous drug use. Applicants who have tattoos have these body markings checked to ensure compliance with ADF Recruiting Policy 025 "Managing Applicants with Tattoos." Although the services have different philosophies with regard to the recruitment of people with tattoos, there are some similarities among the Army, Navy, and RAAF. Navy applicants are not permitted to have tattoos on the face, neck, or scalp, which are visible when wearing any form of Navy uniform. Army and RAAF applicants are not permitted to have tattoos on the face, neck, scalp, ears, or hands. Additionally, Army and RAAF applicants should not have tattoos that could cause offense.[67] Tattoos are not acceptable if they:

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[67] "Managing Applicants with Tattoos," *ADF Recruiting Policy 025*, February 10, 2005, 1.

a.   undermine the dignity and authority of the Army, Navy or RAAF

b.   are garish, numerous, or particularly prominent

c.   could cause offense to members of the public or colleagues and/or invite provocation

MOs record the applicant's blood pressure and then conducts assessments of the following body systems in order: head and neck, orofacial, ears, nose and throat, eyes, respiratory system, cardiovascular system, gastrointestinal system, musculoskeletal system, upper extremities, lower extremities, skin, nervous system, mental capacity, and mental health.[68] Each system has detailed guidelines for a MO to reference for any conditions identified that impose particular medical classifications. At the conclusion of the ELME the applicants are informed of their medical classification based on their physical health as assessed by a MO and the guidelines listed in *ADFP 1.2.1.1* "Health Standards for Entry and Transfer."   An applicant can be given different medical classifications for different job categories. The different medical classification ratings and their interpretation are as follows:

a.   MEC 1—Fit for entry into the ADF.

b.   MEC 2—Fit for entry into the ADF, subject to a waiver for a specific medical condition.

c.   MEC 3T—Denotes that the applicant has a medical condition or clinical finding that is considered remediable and likely to resolve within 12 months. The applicant may be reclassified to MEC 1 when he or she has provided a letter from an appropriate health care provider stating that the condition has fully resolved and that the risk of sequelae or likelihood of recurrence is small.

d.   MEC 3R—Denotes that a report must be obtained from a health care provider about a medical condition or clinical finding. Once the exact diagnosis has been made, and the prognosis and requirement for health care have been determined, the applicant's medical classification will be reviewed by an MO.

d.   MEC 3M—Denotes that a mandatory specialist assessment is required to determine the applicant's fitness for a specific military occupation. Job categories such as Clearance Diver require specialist assessment.

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[68] Op cit, "Heath Standards for Entry and Transfer," 157.

e. MEC 4—Denotes that the applicant is permanently medically unfit for military service. For the purpose of medical classifications, "permanently" refers to longer than 12 months.[69]

All applicants except those classified as MEC 4 are permitted to advance in the recruiting system and be interviewed by a psychologist. Applicants classified as MEC 3R or MEC 3M are often required to attend additional specialist medical appointments, and have the specialist reports reviewed by a MO, before being advanced through to event five, "Psychology Interview". This occurs if there are insufficient psychology or DI staff available to conduct interviews for applicants advanced in the recruiting process by a MO on the assessment day.

b. *Medical Testing*

Applicants who receive a medical classification of MEC 3R or MEC 3M are required to provide further evidence to a MO to support their application for entry into the ADF. DFR assumes all responsibility for the arrangement of these additional reports. Applicants who continually fail to attend the specialist medical appointments made by DFR are withdrawn from the recruiting system. Once the specialist medical report is provided to DFR by the specialist or medical agency, the applicant has his or her medical classification reviewed by a MO. Applicants who are reclassified as MEC 4 are informed of this decision in writing. Applicants who are reclassified as MEC 1 or MEC 2 are advised in writing and advanced through to the Psychologist Interview if this event has not already been completed.

c. *Doctor Appeal*

The final activity in this event occurs when applicants classified as MEC 2 must get a waiver for their medical condition or when applicants classified as MEC 4 appeal their medical classification. Applicants who choose not to appeal their MEC 4 classification are withdrawn from the recruiting system and are a loss from the Assessment process. Applicants who appeal their medical classification must submit a written request for reconsideration of their medical classification. Successful appeals require the provision of new medical evidence indicating that the condition is no longer evident and the risk of recurrence is low, evidence that the original assessment was based

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[69] Op cit, "Health Standards for Entry and Transfer," 257.

on an incorrect diagnosis, or evidence that the standards have been inappropriately applied.[70] Any cost incurred in providing this medical evidence is at the applicant's expense.

The Chief Medical Officer (CMO) DFR is the reviewing authority of initial appeals from applicants. The CMO DFR will advise, in writing, the medical section of the DFR center or branch responsible for the applicant of the outcome of the appeal. When the appeal is unsuccessful or more information is required, a letter advising the applicant of the outcome will also be forwarded to the medical section. If the applicant remains dissatisfied with the outcome of the appeal, he or she may apply to the Director Joint Health Support Agency (DJHSA) for reconsideration of the decision. If DJHSA was the confirming authority for the initial appeal, the Director-General Defence Health Service or delegate will be the confirming authority for the higher-level appeal. Following a higher-level appeal, the applicant should be counseled, either by telephone or in person, as to the outcome by DFR medical staff. Applicants who are successful in their appeal are permitted to continue with their application to join the military. Applicants who are unsuccessful in their appeal are withdrawn from the recruiting system.

A waiver system is in place to allow the entry of exceptional applicants who do not meet entry-level medical standards. Waivers are designed to provide some flexibility when dealing with medical standards to maximize the benefit of ADF. Decisions are based on the available information presented to the reviewer and should address the special skills of the applicant. For a medical waiver to be considered favorably, the applicant must be medically fit for operational deployment and the medical condition must meet the criteria laid out in paragraph 1.20 of *ADFP 1.2.1.1* "Health Standards for Entry and Transfer." Waivers are granted by the single Service personnel agency on the recommendation of, not by, the CMO DFR directly. The final decision by the single Service personnel agency may take up to six weeks.

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[70] Op cit, "Health Standards for Entry and Transfer," 32.

5. Psychologist Interview

The fifth event in the Assessment process is the administration of the psychologist interview. Every applicant must be interviewed by a DFR psychologist before he or she can advance to the sixth event in the Assessment process. Psychologists have the necessary expertise to provide advice to a DI on an applicant's suitability for military service from a psychological perspective. The activities within this event are shown in Figure 20.
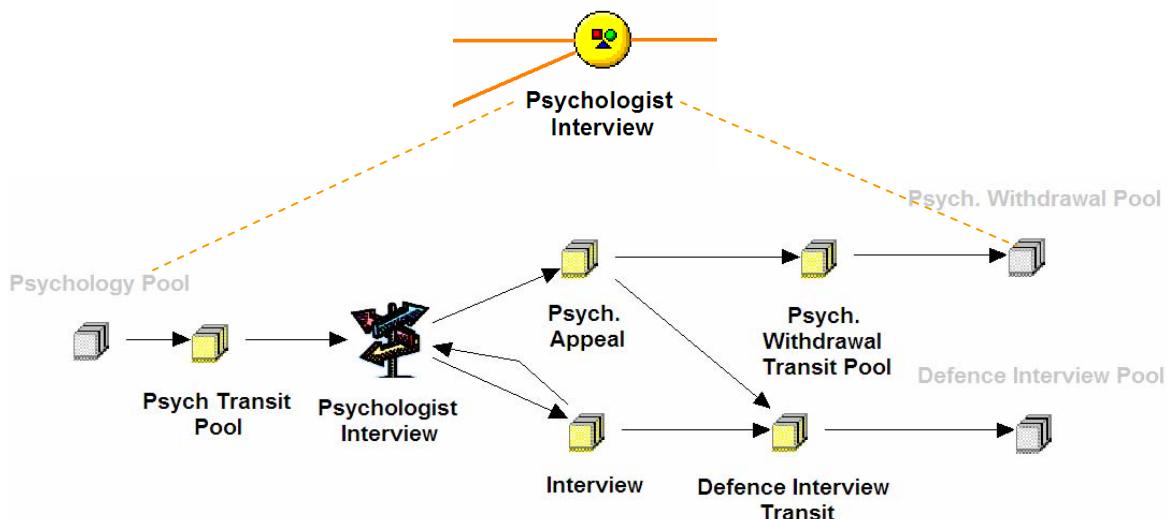
Figure 20.   Process 3: Event 5—Psychologist Interview

a. Interview

DFR psychologists interview each applicant individually and make an assessment as to the applicant's suitability for a military career based on military and training compatibility. The psychologist reviews the applicant's personal history and application information and assesses the psychological suitability for a military career. The psychologist will inquire as to the applicant's involvement with non-medical use of drugs. Involvement by ADF personnel with prohibited substances is not compatible with an effective and efficient Defence Force. The general principle applied by the DI is that any applicant who admits to involvement with a prohibited substance is to be advised that those actions are contrary to the ADF's policy on zero tolerance. Consequently, the processing of their application will not continue unless there are pertinent mitigating

circumstances.[71]   There are three instances where the applicants' admitted use of prohibited substances is grounds for automatic rejection of their application:

  a.   They admit to ongoing habitual prohibited substance involvement.

  b.   They are found to have prohibited substance dependence.

  c.   Subject to the spent conviction scheme there is evidence of their conviction for the use, possession, or trafficking of a prohibited substance.[72]

The psychologist has the ability to recommend the applicant for enlistment or appointment to the DI using a five-point scale.   The recommendation from the psychologist can range from marginally acceptable to outstanding.   The psychologist has the ability to not recommend the applicant based on psychological grounds using a two-point scale.   If the applicant is not recommended by the psychologist he or she is categorized as either *totally unacceptable* or *unacceptable at this time*.   If applicants are given a psychological rating of *totally unacceptable*, they are not permitted to continue with their application to join the military and are withdrawn from the recruiting system. If applicants are given a psychological rating of *unacceptable at this time*, they continue through the Assessment process and are interviewed by a DI.

b.   Psychologist Appeal

Applicants rated *totally unacceptable* for enlistment or appointment are given the opportunity to appeal this decision.   The psychology appeal process can be lengthy, as detailed evidence must be reviewed in order for the appeal to be considered fairly.   Applicants who are successful in their appeal are advanced through the Assessment process and are booked for a Defence Interview.   Applicants who are unsuccessful with their appeal remain withdrawn from the recruiting system and are considered a loss from the Assessment process.

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[71] "Processing Candidates Who Admit to Involvement with Prohibited Substances," *ADF Recruiting Policy 018*, August 19, 2005, 1.

[72] "Involvement by Members of the ADF with Illegal Drugs and Prohibited Substances," *Defence Instruction (General) Personnel 15-2*, June 20, 2005, 2.

6.   Defence Interview

The function of the Defence Interview is to confirm the suitability of the applicant for ADF service (see Figure 21). The interview is not exhaustive, but should examine the applicant's knowledge of the Service and job applied for. To be "suitable," the DI should not expect applicants to demonstrate knowledge beyond what is included in ADF career brochures, career videos, *Careers Explorer* and "Requirements of ADF Service (Essential Reading)." A more detailed knowledge of the Service or job is not required but may be the discriminator between "suitable" and "highly suitable," where that distinction is required.[73] The conduct of the Defence Interview can involve four activities, as shown in Figure 20. The Defence Interview is conducted only after the Psychologist Interview report has been made available to the DI and the DI has read and understood the psychologist's recommendations. The DI must be in a position to have questioned the psychologist if there is any confusion regarding the Psychologist Interview recommendation.
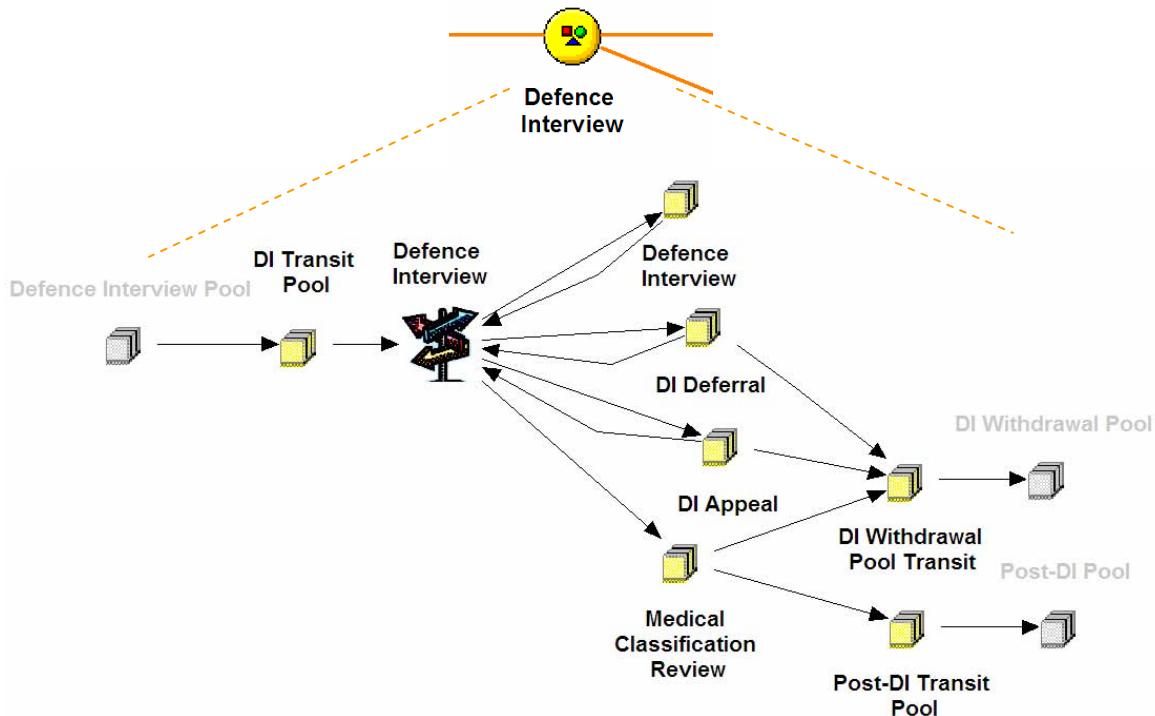
Figure 21.   Process 3: Event 6—Defence Interview

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[73] "Guidance for Completion of Defence Interviewer's Report," *ADF Recruiting Policy 023*, July 11, 2003, 1.

a. *Defence Interview*

The DI conducts the interview with the goal of obtaining sufficient information about the applicant to confirm his or her suitability for military employment and potential ability to complete training, and to identify any personal circumstances that would affect his or her ability to provide unrestricted service. The DI must assess the level of military compatibility the applicant has. This is done by questioning the applicants about knowledge of the Service they have selected to join, determining their interest in the job they have applied for, assessing their understanding of the job role and training requirements, and analyzing the applicants' adjustment/assimilation potential. While the applicants are not expected to know everything about the Service and job for which they are applying, a reasonable level of knowledge is expected. Evidence of this knowledge can confirm that the applicants are making informed decisions, and are prepared for the consequences of their enlistment or appointment if their application to join the military is successful.

During the interview, the DI will also analyze the applicant's personal circumstances, including his or her financial state. It is important that the military not enlist or appoint someone who is or is likely to become an administrative burden. If the applicant's family circumstances warrant it, the DI will request a Defence Community Organisation (DCO) interview before making a final recommendation. If DCO advises that the applicant has personal issues that will likely cause administrative problems for the military, the DI will take this advice into consideration before making the decision on whether to recommend the applicant for enlistment or appointment. Applicants who do not attend a required DCO interview are withdrawn from the recruiting system.

Applicant criminal records are reviewed, not only to assess reliability and trustworthiness, but also to assess the applicant's potential to assimilate into a disciplined workforce. At the completion of the interview, the DI must make a decision on whether the applicant is suitable for ADF service. If the DI does not feel the applicants are currently suitable for enlistment or appointment they have several alternative options to choose from. If an applicant is suitable in all areas except military compatibility the DI can defer the application for a period of up to 12 months. After this time the applicant is permitted to re-take his or her Defence Interview. This time period allows the applicant

to gain further information on the military and the job position he or she has selected as first preference for entry into the Armed Forces. Applicants who are deferred for a specified period of time are advised to rebook another Defence Interview with the Assessment Day Coordinator. Applicants who choose not to rebook another Defence Interview are withdrawn from the recruiting system.

If applicants are deemed unsuitable for entry into the military by the DI, they will be not-recommended for entry into the ADF. The DI informs the applicant of his or her decision, and advices the applicant of any options available to him or her. Applicants who are not-recommended by a DI may appeal this decision but are withdrawn from the recruiting system as a loss from the Assessment process regardless of the applicant's decision to appeal. If the DI feels the applicant is suitable for a career in the military he or she is given a recommendation of "suitable" or "highly suitable." These applicants are referred to the Assessment Day Coordinator, who will advise them of any outstanding issues, such as waivers, that must be dealt with before their application can advance in the recruiting system.

b.   DI Deferral

When applicants are deferred for a specific time period they are advised by the DI of which areas in which the DI felt they were lacking. The applicant is given sources and references that can be used to improve knowledge and are rebooked to a second Defence Interview. Applicants who fail to attend their second Defence Interview are withdrawn from the recruiting system. Applicants who attend their second Defence Interview are assessed by the DI in only those areas deemed lacking from the first interview. The applicant can either be found suitable and recommended for entry into the military or found not suitable and not recommended for entry into the military. Applicants who are not recommended for entry at the second Defence Interview are withdrawn from the recruiting system and are a loss from the Assessment process.

c.   DI Appeal

The third activity in the event is the ability for applicants who were not recommended for enlistment or appointment by the DI to appeal this decision. As with other appeals, the applicant must appeal the DI decision in writing. The applicant must show evidence that the information on which a DI based his or her decision was

incorrect. The Senior Recruiting Military Officer (SRMO) reviews all Defence Interview appeals and makes a judgment on whether to overturn the DI's decision. Applicants who are successful in their appeal continue to be processed with applicants who were successfully recommended by the DI. Applicants who are unsuccessful in their appeal are withdrawn from the recruiting system and are considered a loss from the Assessment process.

d. Medical Classification Review

Before applicants can advance completely through the Assessment process, they must be classified MEC 1 by a MO. As applicants often complete the Psychologist Interview and the Defence Interview with outstanding medical issues, this is the final activity to occur. Applicants are given an indefinite time period to resolve any issues that are outstanding from their ELME. Applicants who are not reclassified as MEC 1, or MEC 2 with a wavier, are withdrawn from the recruiting system. Applicants who were initially classified as MEC 1, or MEC 2 with a waiver, or who were reclassified as MEC 1, or MEC 2 with a waiver, after providing additional medical information to a MO, are advanced through the recruiting system and become an output of the Assessment process. The ELME, Defence Interview, and Psychologist Interview are current for 12 months[74] and applicants must have a current ELME, Defence Interview, and Psychologist Interview at the time of their enlistment or appointment. Applicants that have not resolved their medical issues and obtained an MEC 1, or MEC 2 with a waiver, classification in a reasonable time—considered to be enough time to allow for the completion of any and all enlistment and appointment activities before the expiration of the recommendations and the ELME—are advised that they will need to be re-progressed through the Assessment process again. Applicants who choose not to repeat the Assessment process are withdrawn from the recruiting system.

B. ISSUES

In 2004, 42.5% of general entry applicants who obtained an adequate GAS for entry into the ADF were not interviewed by a psychologist.[75] It is reasonable to assume

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[74] Op cit, "Health Standards for Entry and Transfer," 607.

[75] Op cit, "ADF General Entry Selection: Then and Now," 15.

that this loss is similar to that of officer entry applicants. This loss occurs when GAS-suitable applicants are classified as MEC 4 at either JOES or Assessment, or when GAS-suitable applicants fail to attend their assessment booking. Although losses that occur due to medical failure are beyond the control of DFR managers, other losses can be controlled, and courses of action that reduce these losses should be analyzed and implemented, if appropriate.

1. DR Checklist Losses

Although the DR Checklist plays an important role in the Assessment process, there are minimal losses from this event. The DR conducting the checklist has the ability to continually rebook the applicant to alternative assessment dates until the DR feels that the applicant is suitably prepared for assessment and has the necessary knowledge to support a successful application and obtain a recommended rating from the DI for service knowledge. DRs are often hesitant to withdraw an applicant from the recruiting process on the basis of information gathered and impressions gained during an impersonal phone call. DRs will allow applicants to attend their assessment booking even if the DR feels they are not suitably prepared despite the applicant having been given all the assistance reasonably possible. The onus is on the applicant, who has been informed by the DR of the requirements of the Assessment process to ensure they are adequately prepared.

2. Attendance Losses

Resource constraints often cause a significant delay between the JOES process and the Assessment process. A significant number of applicants fail to attend their assessment booking or withdraw from the recruiting system on their own accord after successfully progressing through the JOES process because their personal circumstances have changed in some manner between the time they submitted their application to join the military and the assessment booking. Although the Assessment process activities and events are conducted six days per week at most recruiting locations (Monday to Saturday), the Saturday assessment positions are allocated to applicants applying for part-time employment categories as a priority. Consensus at DFR is that applicants applying for part-time employment categories are highly likely to have a full-time, non-military

career and have alternative commitments during the week. Although there is no statistical evidence to support this belief, the practice remains of filling Saturday assessment positions with applicants applying for part-time employment categories before applicants applying for full-time employment categories. This practice can cause significant difficulties for applicants applying for fulltime military job categories if they already have a job in a non-military career field.

Given the low unemployment rate in Australia it is reasonable to assume that the majority of applicants are either employed or attend some form of schooling, making it a requirement that the applicants miss work or school for their JOES booking and again for their assessment booking. It is realistic to expect that applicants would prefer to attend JOES and assessment appointments on a weekend rather than arrange to be absent from their place of employment or schooling while applying for a new job. DFR should consider operating on a modified week schedule Tuesday to Sunday, or changing the hours of operation to 1130 h to 2130 h if the normal week schedule is kept. Both options still provides six days per week for applicant processing but provide greater opportunity for applicants to attend their JOES and assessment appointment bookings without missing work or school. A cost-benefit analysis should be conducted, one that considers the benefits of decreasing Assessment and JOES attendance losses in terms of potential enlistments and appointments and the costs involved in changing the operating times of DFR. This cost-benefit analysis would indicate the feasibility of the suggested solution to reduce attendance losses, thus increasing enlistments and appointments.

3. Medical Losses

According to the 2001 National Health Survey conducted by the Australian Bureau of Statistics, 12% of Australians (2.2 million people) reported they currently have asthma, an increase of 8% from 1989−90. This increase may be the result of a number of factors including actual increased prevalence of asthma and heightened awareness of this condition. Of the people with asthma, 59% reported they used pharmaceutical medications to prevent and/or relieve their asthma symptoms.[76] As asthma can be a

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[76] "4819.0.55.001 Asthma in Australia: A Snapshot 2001," *Australian Bureau of Statistics*, April 10, 2004,

condition that prohibits entry into the ADF, increasing asthmatic rates in the population may increase the proportion of applicants classified as MEC 4Q and withdrawn from the recruiting system at the JOES process.

The Australian Institute of Health and Welfare 2005 report titled "General Practice Activity in Australia" states that 15.4% of patient encounters with a General Practitioner (GP) involved the patient seeking medication, treatment, or therapeutic support. Of the encounters, 7.4% were patients seeking GP referral to specialist medical practitioners. These rates are an increase over those described in the AIHW 1999 report of the same title. Statistics such as these indicate that the populations—the supply pool for Defence recruiting—are increasingly seeking medical attention for disorders that require temporary or ongoing treatment in the form of medication or support from specialists such as physiotherapy. In fact, in an average work week, there are 289,038 patient consultations with physiotherapists.[77] It is logical to extrapolate that this high incidence of medication and physiotherapy treatments among the population is affecting the rate of MEC 2, MEC 3R, MEC 3T, and MEC 4 classifications occurring during the Doctor Examination event in the Assessment process.

Dietary behavior is a major risk/protective factor for a multitude of conditions, including heart disease, stroke, high blood pressure, cancer, diabetes, osteoporosis and obesity. Of the population aged over 18 years, 90.9% have an inadequate vegetable intake, and 50.0% have an inadequate fruit intake.[78] These people are at increased risk of the conditions listed above, and are more likely to be found medically unsuitable for entry into the ADF. As with dietary behaviors, lack of physical activity is a risk factor for heart disease, high blood pressure, cancer, diabetes, osteoporosis, mental wellbeing, and obesity. Of the population aged over 18 years, 49.1 % perform inadequate levels of physical activity, seen as fewer than 150 minutes, or fewer than five 30-minute exercise sessions per week. The damage caused by poor dietary habits and/or a lack of physical activity can be reversed, to some extent, by following a healthy eating plan and

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[77] "8552.0 Physiotherapy Services," *Australian Bureau of Statistics*, August 31, 1999, 4.

[78] Cooper-Stanbury, Mark "Risk Factors: That's Life," presentation at Australian Health Conference, Yarralumla, Canberra, June 21 2006, http://www.aihw.gov.au/eventsdiary/ah06/presentations/mark_cooper_stanbury_risk_factors.pdf, accessed August 13, 2006.

increasing the level of physical activity performed. While DFR cannot influence the level of physical activity and dietary behavior prior to an applicant submitting an application to join the military, DFR is in a position to influence the applicants' behavior once they have contacted DFR. By providing guidance on dietary behavior and physical activity needs, it would be expected that the applicant's physical health would improve during the months spent in the recruiting process. This would potentially reduce the number of applicants withdrawn from the recruiting system for medical conditions caused by poor dietary behavior and low levels of physical activity. This course of action would have the dual benefit of assisting applicants to prepare for the PFA and the rigors of military training at an earlier stage than currently occurs.

4. Psychologist Losses

Losses from the Assessment process due to an applicant being classified by a psychologist as totally unsuitable for military service are beyond the control of DFR. In 2004, 36% of Army general entry applicants were not recommended by the interviewing psychologist for entry into the ADF.[79] A study conducted by Captain Andrew Moss of the Defence Force Psychology Organisation in 2005 titled "Success or Failure? An Analysis of Recruiting Measures and Recruit Training Outcomes" showed that 21.8% of Army general entry enlistees rated as "unsuitable at this time" by a psychologist during the Psychologist Interview failed to complete their recruit training. This indicates that the psychologist's recommendation is a strong indication of the applicants' suitability for enlistment or appointment. There is little evidence to suggest that applicants not-recommended by psychologist and withdrawn from the recruiting system at the Assessment process would have a successful military career if they were permitted to continue through the recruiting system and eventually enlisted or appointed in the military. A cost-benefit analysis should be conducted to examine the benefits gained by allowing applicants not-recommended for entry by a psychologist to eventually enlist or appoint in the military by considering whether they successfully completed initial training.

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[79] Op cit, "ADF General Entry Selection: Then and Now," 12.

5. Defence Interview Losses

Losses from the Defence Interview event can occur for several reasons. Applicants can be *not recommended* for entry into the military for a specific job category and withdrawn from the recruiting system. A DI can defer the applicant's application for up to twelve months and require the applicant to re-attend an assessment appoint for a second interview with a DI. The applicant can be recommended at this interview and continue through the assessment process or be *not recommended* and withdrawn from the recruiting system. If an applicant fails to attend a second Defence Interview after one is requested by a DI, then he or she is withdrawn from the recruiting system. As a second Defence Interview will often require the applicants to be absent from their normal place of work or school for at least a half day, and many applicants self-withdraw from the recruiting system at this point because they are unable to take any more days off work or school. As the majority of Defence Interview deferrals are due to the DI judging that the applicant's military knowledge is insufficient, an alternative course of action for these applicants would be a second Defence Interview using a remote contact means, such as the telephone. Alternatively the amendment of DFR operating times would allow greater opportunity for applicants to attend a second Defence Interview on a weekend or weeknight without causing them to miss work or school.

Not Recommended losses from the Defence Interview event when the applicant was not recommended by the psychologist have utilized valuable DI resources that could have otherwise been expended on more suitable applicants. A cost-benefit analysis may determine that it is not financially viable to allow applicants not recommended for entry into the military by a psychologist to advance in the recruiting process, and that these applicants should be withdrawn from the recruiting system at the Psychologist Interview event.

6. Resource Constraints

The Assessment process is extremely time intensive for both DFR staff and applicants. The preliminary medical examination and the ELME involve extensive medical testing using specialized equipment that can be operated only by qualified medical staff. Equipment and staff constraints result in the preliminary medical

examination becoming a bottleneck in the Assessment process. Without the preliminary examination results being available, an applicant cannot be seen by a MO for the ELME. Often, the preliminary examamination and ELME can take up to two hours to complete. The number of qualified DFR medical staff, medical testing equipment, medical examination rooms, and MOs limit the number of applicants who can be seen on any particular day for assessment. If any additional resource constraints are imposed during assessment, such as equipment failure or unplanned staff absences, DFR is unable to complete all Assessment process events for the applicants in attendance. This causes an additional drain on subsequent sessions, as applicants are brought back to a DFR location to complete the Assessment process.

Although it is not the preferred event order—because an applicant seen by a psychologist and/or DI who then is then classified MEC 4 and withdrawn has, in effect, used valuable resources that could have otherwise been spent,—an applicant can be seen by a psychologist before completing the preliminary exam or the ELME. In order for the psychologist to make an assessment on the applicant's suitability for military service, they must interview the applicant in depth, investigating his or her personal circumstances, background, and history. Even an experienced psychologist utilizing advanced interview techniques may take some time to learn enough information about the applicant to enable a decision on military suitability. Applicants who are nervous about their interview or attempting to hide some facet of their personal circumstances can extend the time taken for the psychologist to ascertain their military suitability. Typically, the Psychology Interview can take nearly an hour, with another 20 minutes spent writing the psychologist interview report that is then read by a DI.

When the Psychologist Interview report is available for the DI, the applicant can advance to the Defence Interview. DIs, in general, are not as adequately trained in advanced interview techniques as psychologists. The Defence Interview can also take nearly an hour to complete even though there is substantial overlap among the topics covered in the Psychologist Interview and the Defence Interview. Because the recruiting system is a tri-service process, there is no guarantee that the job position the applicant is applying for is one with which a DI has any experience. Some time may be spent by DIs, familiarizing themselves with the conditions of service applicable to the job position of

an individual applicant who they will interview. It is necessary that DIs understand the demands of the job position under consideration, so that they can determine the applicants' level of job knowledge and understanding. If available and appropriate, effort should be made to match DI's subject matter expertise with an applicant's preferred job position, such as an Army Officer DI with an applicant applying for Royal Military College (RMC) entry.

DI availability and interview room vacancy dictate the number of applicants who can be interviewed at any one time. In a perfect situation the number of applicants booked for assessment will coincide with medical, psychologist, and DI staff availability. However, as applicants are booked for assessment up to two months in advance, and staff availability is managed monthly or even weekly, there are often disparities between the two. To complicate the situation, when an applicant must be rebooked for assessment for a second Defence Interview or for medical reclassification, it places additional demands on DI and/or medical staff. These additional applicants must be seen along with the applicants booked for their initial assessment. Because the maximum throughput of the Assessment process is often less than the output of the JOES process, an accumulation of applicants occurs. This accumulation extends the delay between the JOES process and the Assessment process, which can increase the magnitude of assessment attendance losses.

To increase the throughput of the Assessment process, one of two actions must occur. Equipment, staff, and facility resources must be augmented, or applicants' examination and interview time must be decreased. Either of these actions, occurring in isolation, will increase the number of applicants who can be processed on any one day for assessment. Decreasing the length of time for interviews is possible with advanced interview technique training, which is not currently provided to DFR staff. Removing the overlap between the Psychologist Interview and the Defence Interview will also reduce interview times, as will providing training that ensures DIs have adequate knowledge on a range of military jobs, so they are not learning job-specific information prior to conducting a Defence interview. Equipment, staff and facility resource levels are difficult to impact without significant financial expense and this action should only be

considered if decreasing interview times does not yield the throughput necessary to increase the Assessment process output in a reasonable timeframe.

C.   RELATIONSHIP WITH PROCESS FOUR: OSB/FSB AND PROCESS FIVE: ENLISTMENT / APPOINTMENT

General entry applicants recommended by a DI and classified as MEC 1, or MEC 2 with a waiver, are approved for enlistment. These applicants advance through to process five in the recruiting system, Enlistment/Appointment. Officer entry applicants recommended by a DI and classified as MEC 1, or MEC 2 with a waiver, are required to attend a FSB for pilot applicants only, or an OSB for all other officer avenues of entry. The OSB/FSB process is the fourth in the recruiting system.

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VI. PROCESS FOUR—OSB/FSB

A. DESCRIPTION

As the fourth process in the RSM, shown in Figure 22, "OSB/FSB" has a single purpose: selecting the best officer entry applicants from among those recommended for appointment to the military and offering a position to these exceptional applicants in the job position of their choosing. This purpose is an event in the OSB/FSB process titled "Officer/Flight Selection Board," shown in Figure 23. This event has several activities that are performed by resources and staff within DFR and resources and staff external to DFR. The effective operation of this process requires in-depth coordination among DFR staff, individual Service authorities, and numerous military units around Australia.
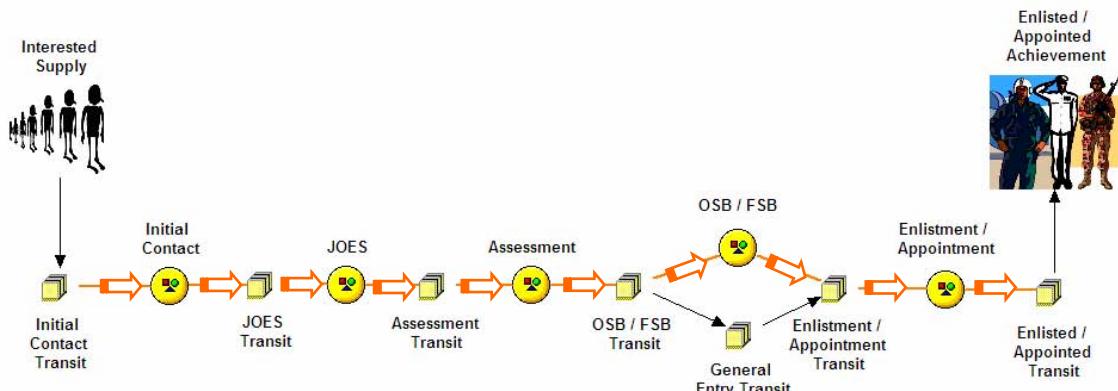
Figure 22.   RSM

1. Officer/Flight Selection Board

Merely being recommended for entry into the military by psychologists and DIs, and approved fit for entry by MOs is not enough to ensure the eventual appointment of an applicant to the military as an officer. Each officer entry applicant must be assessed by a board of senior military staff, each board member a subject-matter expert with a wealth of experience and knowledge applicable to the job position or specific employment category for which the applicant seeks entry into the Armed Forces. While previous eligibility events involve applicant assessment based on personal circumstances and characteristics, OSB and FSB involve a greater depth of interpersonal interaction with the applicants.
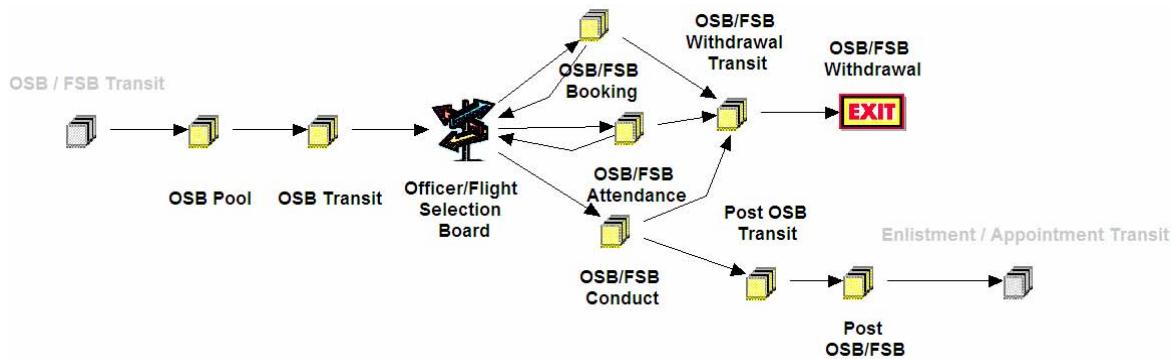
Figure 23.   Process 4: Event 1—Officer/Flight Selection Board

a.   OSB / FSB Booking

Applicants applying for entry into the Services for a job role that involves aircraft, such as pilots, observers, and navigators, attend an FSB. A FSB is conducted in a different manner from an OSB. FSBs are a two-week event held in Tamworth, New South Wales. FSBs are conducted numerous times throughout the year, but positions are still extremely limited. All applicants recommended for entry who require a FSB have their application paperwork sent to the FSB Coordinators (external to DFR) by the Appointment Coordinator, a member of DFR staff. A paper board is conducted on these applicants and those deemed exceptional applicants with a high likelihood of success at FSB are booked for FSB. Applicants are offered several FSB dates to allow coordination with their work or schooling commitments. Applicants who are not selected for FSB at the paper board are withdrawn from the recruiting system.

Applicants applying for entry into the Services for non-aircraft officer roles are required to attend an OSB. OSBs are held at local military units or at DFR locations for all other officer roles except Australian Defence Force Academy (ADFA) applicants. The Appointment Coordinator liaises with the relevant Service authorities who schedule the OSBs. The OSB schedule takes into consideration the number of applicants recommended for officer entry in the Assessment process, the availability of board members, and the scheduling of any officer training courses that successful officer appointees are required to attend. All applicants recommended for officer entry at assessment are allocated a position at an OSB. ADFA applicants are required to attend

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an OSB held in Canberra, Australian Capital Territory. Because most ADFA applicants are currently attending some form of schooling, and because the ADFA OSB is a one-week event, the ADFA OSB is scheduled once per year in the middle of school holidays. A second ADFA OSB may be scheduled at the end of the calendar year if the number of applicants recommended for entry into the military at the ADFA OSB is insufficient to meet recruiting goals.

b. OSB / FSB Attendance

Although applicants are offered several options for when they attend OSB or FSB (except for ADFA applicants), instances occur where applicants fail to attend their OSB booking due to other obligations. If possible, applicants are rebooked to another OSB or FSB date. Continual failure to attend an OSB booking will result in the applicant being withdrawn from the recruiting system. Applicants who cannot be rebooked to another OSB or FSB date due to lack of OSB/FSB position vacancies are withdrawn from the recruiting system. Attendance failure occurs more frequently for locally scheduled OSBs, than for the ADFA OSBs or FSBs.

c. OSB / FSB Conduct

Depending on the Service and type of entry (part-time or fulltime), locally scheduled OSBs can involve a mix of activities, including a formal interview in front of a panel of board members, an oral communications component, physical activities, leadership exercises, and observation of group interaction. The applicants' participation in the various activities is assessed by board members and the applicants are graded for their potential to be a military officer. The ADFA OSBs also include a tour of ADFA grounds and visits to places of military significance such as the Australian War Memorial. The applicants' reactions to such visits and tours are observed and form part of the judgment on suitability for officer entry into the military. FSB is extremely detailed and applicants applying for air employment categories experience an intense evaluation on their ability to succeed at pilot, observer, or navigator training. Applicants are placed in an environment that simulates the applicable training they would undergo if successful in their application to join the military. Pilots are taught to fly, navigators to

assist a pilot with navigating, and observers to assist a pilot with observing; their skills at these task are intensely scrutinized by experienced military officers and non-commissioned officers.

After the OSB or FSB has concluded, applicants are graded for their officer potential and training potential. Applicants' application dossiers are provided to the relevant Service authorities who rank them in order of merit. The Service authorities select those applicants highest on the order of merit against the available recruiting goals and charge the Appointment Coordinator with releasing a formal Letter of Offer to those applicants selected. Applicants who were not selected for appointment by the Service authorities are withdrawn from the recruiting system.

B.   ISSUES

A significant number of resources have been expended by DFR in processing applicants through to the OSB/FSB process of the recruiting system. Applicants who fail to be recommended for appointment at OSB or FSB have used DFR resources that could have been expended on other applicants, and have taken an OSB or FSB position that could have been filled by another, more suitable applicant. One of the purposes of the previous processes in the recruiting system is to ensure that applicants sent to OSB or FSB are eligible and suitable to join the military based on military compatibility, training compatibility, and personal circumstances. Therefore, the board members should not be *non-recommending* applicants for entry into the military based only on other deciding factors as qualities such as military compatibility should have been noticed by DIs or Psychologists. If an applicant is not recommended by the board on the basis of factors that should have been identified in an earlier process, valuable DFR resources have been wasted.

Losses can occur from the OSB/FSB process when applicants fail to attend their booking or are unable to attend any booking due to other commitments. Local OSBs for full-time officer entry applicants are held during the working day while OSBs for part-time officer entry applicants are held in the evening or on a weekend. By holding some

OSBs for full-time officer entry applicants during the evening or on the weekend, the OSBs can be more easily attended by those applicants who have work or school commitments.

Previously ADFA OSBs were held at DFR branches around Australia and were a single-day event held numerous times throughout the year. This reduced the time applicants spent away from their home address and reduced the inconvenience the current one-week event places on those who may have planned alternative activities during the school holiday period. A cost-benefit analysis is suggested, one that investigates the training success rate of applicants recommended at an ADFA OSB held locally, compared to the training success rate of applicants recommended at an ADFA OSB held in the ACT. If the study shows that the training success rate has not considerably improved under the new ADFA OSB conditions, then consideration should be made to revert to local ADFA OSBs held more frequently, providing financial considerations have been taken into account.

C. RELATIONSHIP WITH PROCESS FIVE: ENLISTMENT/APPOINTMENT

The output of this process is all officer entry applicants who have been successfully recommended at an OSB or FSB and selected by the relevant Service authorities to receive an offer of appointment for entry into the military in their preferred role. This output is combined with the general entry applicants who were recommended for enlistment at the Assessment process and classified medically fit-for-entry to form the input for the fifth process in the recruiting system, Enlistment/Appointment.

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VII. PROCESS FIVE—ENLISTMENT/APPOINTMENT

A. DESCRIPTION

As the fifth and final process in the RSM, (see Figure 24), Enlistment/Appointment has two key purposes: concluding the testing and confirmation of eligibility to join the military, and performing an enlistment or appointment ceremony that officially enlists or appoints applicants to serve in the Service of their choice. The input for this process includes all general entry applicants who have successfully advanced through the Assessment process and all officer entry applicants who have successfully advanced through the OSB/FSB process. The output of this process becomes the supply of ab initio personnel into the ADF. The output of this process should match the ab initio recruiting goals set by the Services necessary to maintain or grow the strength of the ADF workforce. When the output of this process does not meet the ab initio recruiting goals, the recruiting system has failed to achieve the throughput required. In previous years the output from the Enlistment/Appointment process has been less than 85% of that required to meet ab initio recruiting goals when averaged across the Services and avenues of entry.
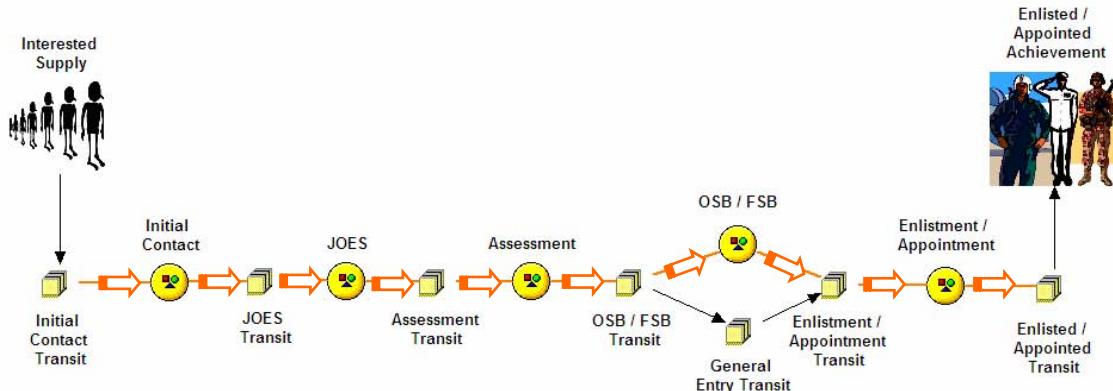
Figure 24.   RSM

The two purposes of the Enlistment/Appointment process are dealt with in two separate events, Pre-Enlistment/Appointment Eligibility and Enlistment/Appointment Ceremony, (see Figure 25). Each event involves several activities that transform the potential military personnel into serving military personnel using DFR resources.

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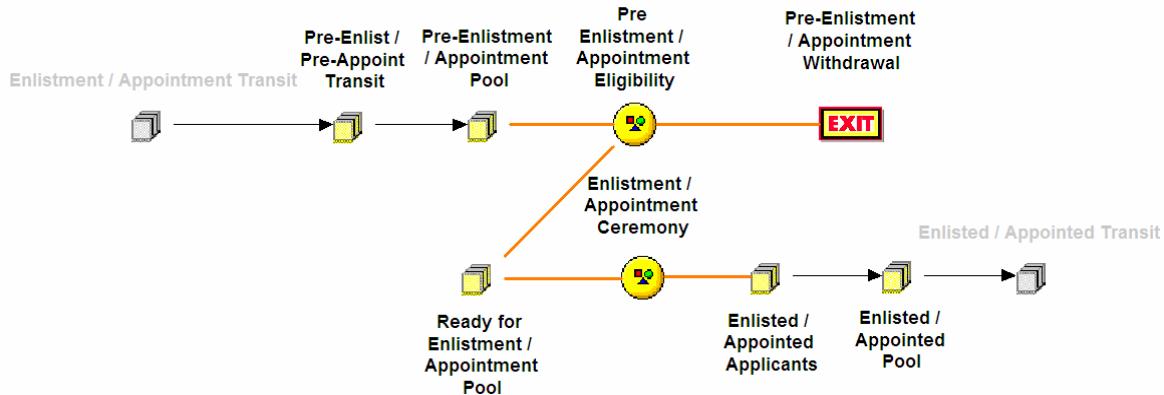
Figure 25.   Process 5: Event 1 and 2—Pre-Enlistment/Appointment Eligibility and
Enlistment/Appointment Ceremony

1.   Pre–Enlistment/Appointment Eligibility

The first event in the Enlistment/Appointment process is concluding the testing and confirmation of the applicants' eligibility to join the military. This involves several activities, as shown in Figure 26. These activities are the responsibility of the Enlistment Coordinator (for general entry applicants) or the Appointment Coordinator (for officer entry applicants).   These two DFR staff members will interact with external organizations, such as the Australian Federal Police (AFP) and Defence Security Authority (DSA), as well as staff internal to DFR, such as medical staff and DRs qualified to administer the PFA.

a.   PFA

The PFA is now the first activity conducted in this event, which was not the case several years ago. The change in activity order occurred because the PFA is an activity that applicants often initially fail and have to re-attempt multiple times. A significant number of applicants fail to pass the PFA and are withdrawn from the recruiting system; these applicants have been allocated a job position that could have otherwise been filled by a more qualified applicant and have utilized DFR resources that could have otherwise been better expended. By making the PFA the first activity in this event, only those applicants who pass the PFA are advanced through the recruiting system, making more efficient use of resources. To pass the PFA, applicants are required

to attempt a shuttle-run test/beep test, push-up test and sit-up test at differing levels, depending on the Service applied for entry and, in some instances, the job position as well.
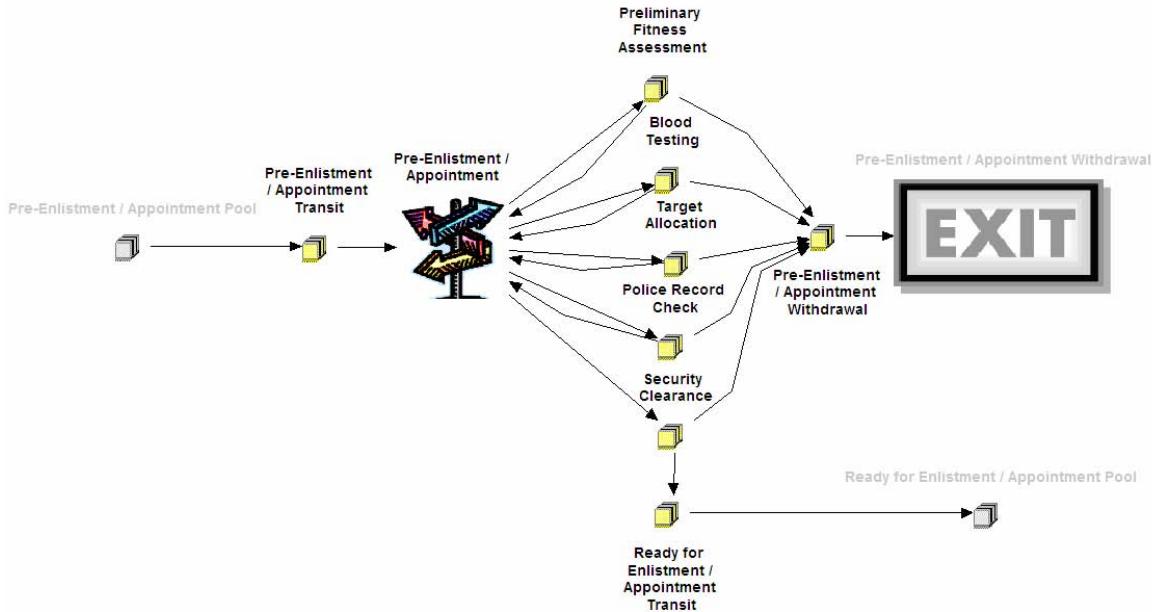
Figure 26.   Process 5: Event 3—Pre-Enlistment/Appointment Eligibility

The PFA standards that must be reached to obtain a pass are detailed below, taken from *ADF Recruiting Policy 032* "Pre-Enlistment/Appointment Fitness Assessment Policy":

- **Army.**
  - (1)   shuttle run/beep test to a standard of 7.5
  - (2)   45 sit-ups
  - (3)   15 push-ups for men and eight push-ups for women
- **Navy.**
  - (1)   shuttle run/beep test to a standard of 6.5 for all avenues of entry except Clearance Divers, who must pass the PFA to Army standards
- **Air Force.**
  - (1)   shuttle run/beep test to a standard of 6.5

If applicants pass the PFA, they are advanced through to the next activity in this event. Applicants are allowed as many re-attempts as they desire, now that the PFA is the first activity conducted. Because it is a requirement that a PFA is passed within eight weeks of the applicants' enlistment or appointment into the ADF, there is a necessity for some

applicants to pass the PFA a second time if their original PFA pass result was obtained outside of this eight-week period. As with many other eligibility and suitability assessments, there exists the ability to have the requirement to pass the PFA waived by the SRMO under certain circumstances, which differ for each Service.[80]

b.   Blood Testing

The second activity in this event requires the applicant to submit to a blood test conducted by DFR medical staff. Pre-enlistment/appointment blood test results are valid for only 12 months. The purpose of this activity is to screen for Hepatitis B, Hepatitis C and human immunodeficiency virus[81]. Identification of the applicant's blood group and screening for the presence of G6PD is conducted after the applicant has successfully joined the military. Applicants who receive a positive result from the pre-enlistment/appointment blood test are referred by the MO to their family doctor or an appropriate referral center and are withdrawn from the recruiting process. If the results of the blood test have not been received on the date of entry, enlistment or appointment must not be performed until negative serology is confirmed, unless provisional enlistment has been approved.

c.   Target Allocation

Defence Workforce Planning not only determines the targets that need to be filled to meet ADF manning strength requirements, but also works with the Service training establishments to schedule initial entry training courses for general entry and officer entry job positions. When a general entry applicant is matched to a target available within the next six months, he or she is sent a Letter of Offer from DFR. Officer entry applicants have already received a Letter of Offer from the relevant CMA after successfully completing an OSB or FSB and being selected for appointment. The Letter of Offer clearly indicates a date on which the applicant will be enlisted or appointed into the ADF. When there is no target available within six months to match the applicant to, he or she is are notified and given the option to wait in the recruiting system until a target becomes available or withdraw from the recruiting process. Applicants who choose to wait for a target are offered positions on the basis of

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[80] "Pre-Enlistment / Appointment Fitness Assessment Policy," *ADF Recruiting Policy 032*, December 13, 2005, 2.

[81] Op cit, "ADF Health Standards for Entry and Transfer," 113.

their application date to join the military—not on the quality of their application. When the targets for a particular job category are limited, applicants are often required to wait for more than 12 months in the recruiting system. Applicants with a job category preference that is unlikely to be available within 12 months are informed of the situation at the earliest possible opportunity; however, it is ultimately the applicant's decision to wait in the recruiting system or withdraw. As many of the eligibility and suitability assessments conducted have expiration dates of 12 months or less, applicants who choose to wait in the recruiting system are regularly reassessed for eligibility.

d. *Police Record Check*

Although applicants have been questioned several times by various DFR staff on their criminal history and possible police record, it is essential that the information provided is confirmed by the AFP. Applicants are required to sign a form consenting to a Police Record Check (PRC). Once signed, this consent is considered valid for three months. Once returned by the AFP to DFR, the information contained in the PRC is valid for six months. The PRC encompasses all federal and state criminal history records, but not necessarily state civil (traffic) convictions.[82] Occasionally, an applicant will commit an unlawful act while awaiting enlistment/appointment and this may result in a PRC that does not concur with the applicant's volunteered offense history. In this situation, the applicant is to be advised that a review of his or her suitability for enlistment/appointment will be undertaken. While acknowledging that the applicant should have been on good behavior awaiting enlistment/appointment to the ADF, it is not considered grounds for automatic withdrawal from the recruitment process. The nature and circumstance of the offense committed during the recruiting process is to be considered by the SRMO before a decision is made on whether the applicant can proceed in the recruiting system.[83] This action is also taken when the PRC discloses an offense committed prior to the applicant attempting to join the military, which was not disclosed during the JOES or Assessment processes.

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[82] "Police Record Checks," *ADF Recruiting Policy 021*, May 23, 2005, 1.

[83] Op cit, "Management of Candidates with a history of Criminal or Civil Cffences, Unacceptable Behaviour or Restrictive Circumstances," 6.

e.   Security Clearance

Applicants processed by DFR and found suitable for ADF enlistment or appointment will be deemed to have a restricted security clearance upon entry. DFR locations are responsible for the distribution, receiving and checking of applications for a security clearance.[84] Completed forms are to accompany the applicant to the recruit training establishments and to be provided to the Security Officer in each location. The security clearance packs are distributed with the applicant's Letter of Offer. Although the responsibility for completing the security pack is that of the applicant, DFR locations are required to receive the completed pack from the applicant prior to his enlistment/appointment date and check it for completeness. Applicants are advised that some employment categories require a 10-year background check, and if the relevant Service authority cannot complete this check, the applicants' continuing service in the military may be in jeopardy. Applicants can choose to withdraw from the recruiting system upon receiving this advice; however, the decision to discharge applicants from the military once they are enlisted/appointed is the responsibility of the relevant Service authority that handles the applicants' security clearance. This activity completes the Pre-Enlistment/Appointment event. All applicants not withdrawn from the recruiting system advance through to the Enlistment/Appointment Ceremony event.

2.   Enlistment/Appointment Ceremony

The second event in the Enlistment/Appointment process is the performance of final administrative testing to ensure that the applicants' eligibility to join the military has not changed since he was last assessed by DFR medical staff. Providing the applicant is still eligible to enlist or appoint into the ADF, the enlistment/appointment ceremony formally accepts applicants into service in the Armed Forces and commences their military career (see Figure 27).

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[84] "Processing of Security Clearances for Candidates," *ADF Recruiting Policy 037*, May 03, 2005, 1.
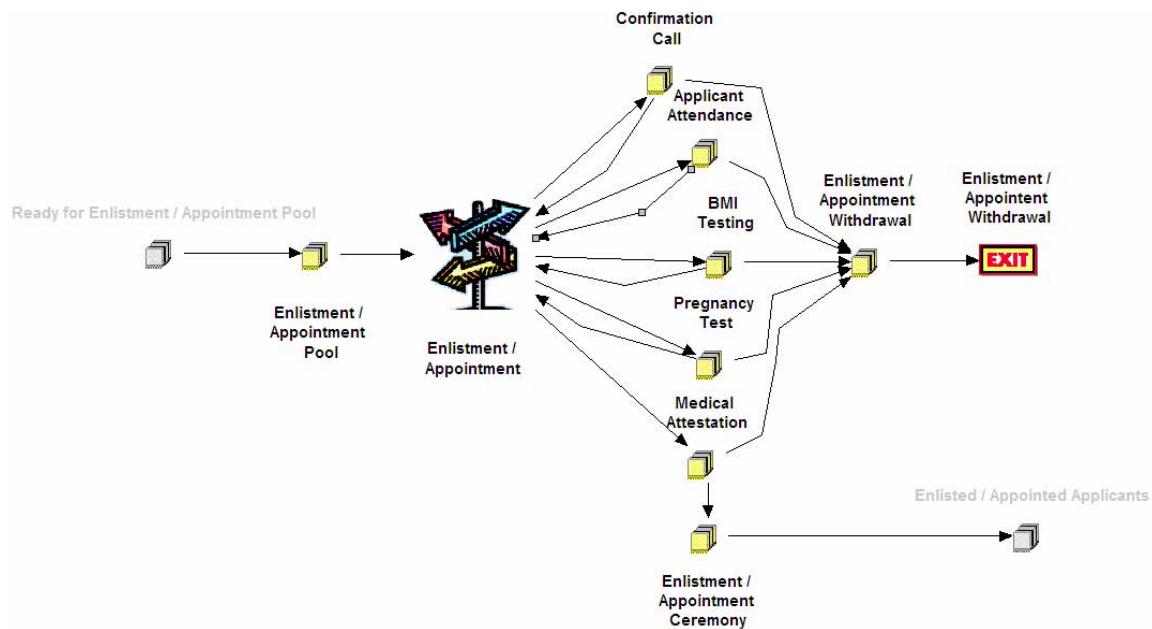
Figure 27.   Process 5: Event 4—Enlistment Appointment Ceremony

a.   *Confirmation Call*

The first activity conducted in this event is the Enlistment Coordinator or Appointment Coordinator contacting the applicants and ensuring they are prepared for their upcoming enlistment/appointment. This is done between one and three weeks prior to the enlistment/appointment date. Applicants can notify the coordinators that their circumstances have changed, and that they desire changing the date that they are to be enlisted or appointed. Most employment category targets are linked to a specific enlistment/appointment date, so applicants wishing to change their enlistment/appointment date may, in effect, be giving up the target that has been assigned to them. There is no guarantee that another target for the job position they have chosen will be available at a later date.

The confirmation call also provides an opportunity for applicants to notify DFR, with sufficient notice, that they no longer wish to continue their application to join the military. This way, DFR can attempt to offer this position to another eligible applicant with a first preference that matches the now vacant target. There is no guarantee that such an applicant will be available. Applicants who make the decision to cancel their application to join the ADF are withdrawn from the recruiting system.

b.   *Applicant Attendance*

The activities conducted prior to the enlistment/appointment ceremony can be time intensive. Applicants must present to DFR at a specified time so that these activities can be completed and the ceremony performed while still allowing sufficient time for those applicants who are required to immediately attend their initial employment or service training to make their way to a local transport hub. Applicants who are extremely late may not have sufficient time before the enlistment/appointment ceremony for their eligibility to be assessed, and will not be part of the enlistment/appointment ceremony conducted that day. Enlistment and Appointment Coordinators will attempt to re-book applicants to an alternative enlistment/appointment date, but there is no guarantee that another target for their chosen job position will be available at a later date. Applicants who are absent will be contacted by the Enlistment and Appointment Coordinators and an alternative target allocation and subsequent enlistment/appointment date will be sought if the applicant so desires. Frequently, applicants who failed to attend their enlistment/appointment date later retract their application to join the military and are subsequently withdrawn from the recruiting process.

c.   *BMI Testing*

The third activity in this event is to verify that the applicant's BMI is still within the acceptable range for entry into their chosen employment category. DFR medical staff will determine the applicants' BMI, and if necessary, their body fat percentage using the same procedures required for the preliminary medical exam. The results of the applicants' BMI and body fat test (if required) are provided to the MO for review when the medical attestation is performed.

d.   *Pregnancy Test*

All female applicants are given a pregnancy test, conducted by DFR medical staff. If a positive result is returned, the applicant is made MEC 3T, and found unfit for entry into the ADF at that time. This is because pregnancy is not considered compatible with recruit training or operational deployment. Heavy lifting, severe physical exertion, irregular sleep and meals are all potential risks to the wellbeing of the applicant and the unborn child.[85] The lengthy time involved in the pregnancy term and

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[85] Op Cit, "ADF Health Standards for Entry and Transfer," 335.

subsequent recovery by the applicant often requires the ELME, Psychology Interview and Defence Interview to be re-conducted. While applicants found to be pregnant at enlistment/appointment are few, these applicants often withdraw from the recruiting system as their chosen career no longer suits their personal circumstances.

e. Medical Attestation

The purpose of the Medical Attestation activity is to ensure that the applicant is still fit to undergo military training.86 All successful applicants are to be medically reviewed immediately before entry by a DFR MO. The applicant is undressed and observed for signs of injury, intercurrent illness, new scars or identifying marks. Further medical examination is conducted if clinically indicated. The Medical Attestation activity is extremely important, as applicants must be fully fit to commence military recruit training at the time of enlistment or appointment. Any applicant who has experienced a life crisis, has required counselling from a psychologist or social worker, or has been diagnosed with a personality disorder is to be reviewed by a psychologist to assess his or her continued suitability for enlistment or appointment.

Any condition, illness or injury that will either impair an applicants ability to commence full and unrestricted training or impact on fitness for operational deployment, is reported to the Enlisting or Appointing Officer. If the applicant is found to be MEC 3 due to an intercurrent illness or injury, his or her enlistment or appointment will be at the discretion of the recruit establishment or initial officer training unit. The SRMO is responsible for addressing the individual's fitness for entry. In cases of any doubt, CMO DFR should be contacted for advice.[87] Applicants who are found to be unfit for entry will be contacted by the Enlistment or Appointment Coordinators and an alternative target allocation and subsequent enlistment/appointment date will be sought if their medical condition or illness is likely to resolve itself in the near term.

f. Enlistment/Appointment Ceremony

The final activity in the Enlistment/Appointment process, and in the entire recruiting system, is the official ceremony in which the applicants are enlisted or appointed into the ADF, depending on their entrance job position and avenue of entry.

[86] "The Medical Process for Applicants Applying for Entry into the Australian Defence Force," *DFR Recruiting Form 033*, August 06, 2005, 1.

[87] Op Cit, "ADF Health Standards for Entry and Transfer," 113.

Enlistments are to be conducted by an Officer of at least Warrant Officer Class One rank; appointments are to be conducted by an Officer of at least 03 grade.[88] The actual enlistment ceremony is simple, and involves general entry applicants taking an oath or affirmation concerning their prospective service. Upon stating the oath or affirmation, the applicant is legally bound to serve for a specified period of time and is a member of the ADF. The appointment ceremony is equally simple, and involves officer entry applicants making a signed attestation regarding their service while in the ADF. Once the enlistment/appointment ceremony is concluded, a recruiting target is considered to have been achieved.

B. ISSUES

Losses from the recruiting system during the Enlistment/Appointment process occur when an applicant's application for entry into the ADF is withdrawn; the withdrawal can be DFR initiated or applicant initiated. These withdrawals are extremely expensive because applicants who reach the Enlistment/Appointment process have utilized valuable DFR resources in preceding processes assessing the applicants' eligibility and suitability for military service. As the output from the Enlistment/Appointment process provides achievement of recruiting goals, any losses from this process directly affects the ability of DFR to achieve the necessary quantity and quality of enlisted/appointed applicants to meet Defence Workforce Planning requirements. The first priority of addressing the existing shortfall in achieving recruiting targets is to review the losses occurring from the Enlistment/Appointment process and develop courses of action that will reduce these losses. Reducing applicant withdrawals from the Enlistment/Appointment process has the greatest benefit for DFR when compared to the benefits to be gained from reducing withdrawals during other processes in the recruiting system. To reduce withdrawals from the recruiting system during the Enlistment/Appointment process, it is important to understand the causes of the losses before possible solutions can be considered.

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[88] "Enlistment and Appointment," *ADF Recruiting Policy 019*, September 29, 2004, 2.

1. PFA Losses

A substantial number of the PFAs attempted by applicants result in failure. Although applicants can re-attempt the PFA until they withdraw from the recruiting system, are withdrawn from the recruiting system by DFR, or pass the PFA, these options either reduce the pool of applicants considered eligible for service (and thus the pool of potential enlistees or appointees) or increase the time spent in the recruiting system. Because employment category targets are often linked to enlistment/appointment dates, time spent by an applicant continually attempting the PFA can result in an employment opportunity passing without an applicant being allocated to that target. Efforts to reduce the failure rates at the PFAs should be contemplated. Although a PFA brochure is available, which suggests a training regime for applicants, little is done to ensure that applicants train for the PFA in any practical manner. Applicants are provided this brochure if they are successful during the JOES process, and can obtain PFA-specific information from the DFR web portal.

A course of action that could be implemented involves providing physical training opportunities to applicants at the commencement of their progression through the recruiting system. Fitness training sessions could be arranged under the supervision of DFR staff trained in physical training, such as Officer's or qualified sub-unit Physical Training Instructors (PTIs). Applicants could attend these fitness training sessions that would focus on the skills needed to successfully pass the PFA, as well as providing information and guidance on healthy eating habits. Reducing the PFA failure rates during the Enlistment/Appointment process would potentially assist in the following:

> a. Reducing the occurrences of failed target achievement due to lack of suitable applicants for allocation to target
>
> b. Reducing the instances of applicants failing to meet BMI or body fat standards during Medical Attestation
>
> c. Reducing recruit failure at initial training due to inability to pass physical fitness assessments

2. Target Allocation Losses

Although current practice during the JOES process is to identify employment categories that have vacancies within the next six-months and for which applicants meet

the initial aptitude requirements, it is the applicants' choice as to which job they seek for entry into the ADF. Many applicants select employment categories for their first preference that do not have vacant targets within a six-month period. Some applicants select employment categories for their first preference that do not have vacant targets within a 12-month period. Applicants select these employment categories as the allocation to target activity that allocates eligible applicants to available targets uses an order system that is based upon the applicants' initial application date for entry into the ADF. Some applicants are so eager to join the military in a specific role that they are willing to wait in the recruiting system for several years, if need be, repeating the JOES and Assessment processes as necessary to maintain the currency of their eligibility assessments. Applicants making this choice repeatedly used DFR resources in their quest to join the ADF in their chosen employment category, often with little success.

The following are two alternatives to having applicants wait in the recruiting system for an indefinite period after being processed through the JOES and the Assessment processes:

a. Order of Merit Selection—The pilot employment category is the only one in the ADF that currently uses Order of Merit selection when allocating Applicants to targets. In a perfect world, Order of Merit selection would be used for other officer avenues of entry, except that in recent years, insufficient numbers of applicants have been recommended from OSB to meet recruiting goals, meaning there has not been the excess number of applicants necessary for Order of Merit selection to be useful. There are some general entry employment categories that consistently have an excess number of applicants to meet recruiting goals, such as Fire Fighter and Clearance Diver job categories. By applying Order of Merit selection to these applicants after the Assessment process, DFR would be in a position to prevent applicants rated with a low recommendation for entry into the ADF to continually wait in the recruiting system for an indefinite period of time, using DFR resources to prevent expiration of eligibility assessments.

b. Closing Employment Categories—When there are no target vacancies for a particular employment category within a 12-month period, whether because of excess

number of applicants in the recruiting system or a lack of requirement for an employment category as determined by Workforce Planning, DFR has the option to "close" an employment category and prevent Applicants from continuing in the recruiting system with that employment category as their first preference. If a policy were to be put in place that ensured that applicants who expressed an interest in a particular military career could re-apply when that employment category becomes available, and have their date of application for target allocation purposes be the date upon which they originally expressed interest, it is conceivable that applicants would be content to wait until contacted by DFR before continuing with their application and using DFR resources. This policy would require that DFR keep a record of applicants who have expressed an interest in a particular "closed" employment category so that these applicants can be contacted when the job becomes available. This way, applicants can choose to continue their halted application, allowing the progress of applicants to be delayed at the JOES process, freeing up the resources used in the Assessment process for applicants with job preferences that have targets available within the next six months. DRs should have the responsibility of contacting interested applicants when job positions open, and not the other way around as is currently practiced.

3.   Confirmation Call/Attendance Losses

The current Enlistment/Appointment process has only informal contact between DFR and the applicant outside of the formal activities listed here. The time period between the applicant being recommended for entry during the Assessment process and the actual enlistment/appointment date can be lengthy (upwards of six months in some cases). While there is intermittent contact between DFR and the applicant during this time with the conduct of a PFA, issue of a Letter of Offer and blood tests, other interaction is limited outside of that initiated by individual Enlistment or Appointment Coordinators. There is no formal requirement of any specific level of interaction required outside of the formal activities and events conducted. Applicants frequently find civilian employment during this time period and often prefer to stick to a guaranteed position in

an organization rather than a career in the military that can be cut short if the applicant fails to pass any of the Enlistment/Appointment process activities, initial recruit/officer training or employment training.

The implementation of a motivation program that applicants could participate in from the time they are successfully advanced through the Assessment process until they are formally enlisted or appointed into the military should be considered. This program can provide a greater level of formal interaction between the applicants and DFR, which will allow closer monitoring of any changes in the applicants' personal circumstances that may affect their ability to join the military on the specified date. This program can also provide an opportunity for applicants to learn general military information that they would otherwise be expected to study at recruit training or officer training. The program could expose applicants to military unit operation and administration in order to reduce the adjustment that occurs when a civilian begins to serve in the ADF. Other activities such as fitness training, mentorship and introduction to other potential recruits, can also occur. The concept of basing such a program on the existing U.S. military's Delayed Entry Program (DEP) should be investigated further. The motivation program would be an opportunity to continually inform applicants of changes to their enlistment or appointment dates and put Enlistment Coordinators and Appointment Coordinators in a better position to fill unexpectedly vacated job category positions. An investigative report into the U.S. DEP will be available to interested parties in November 2006 from this author.

4. Medical Losses

The lengthy time delay between commencement of the Enlistment/Appointment process and the actual enlistment/appointment ceremony allows opportunity for applicants to be injured or catch an illness that will render them unfit for entry into the military. The implementation of a motivational program will potentially reduce the instances of enlistment/appointment day withdrawals due to Medical Attestation activity failure because applicants will be closely monitored and mentored by DFR staff. If an applicant suffers an injury that will potentially render him or her unfit for entry, this can be dealt with in a time frame that allows another applicant to be substituted to the target

allocation and enlistment/appointment day, and will give the injured applicant greater time to recover. By making the health of applicants the priority, the instances of recruit and officer withdrawals from initial training can be reduced. Reducing Medical Attestation activity losses will improve achievement of recruiting goals, and make the recruiting system a more efficient and effective operation.

C.   SUBSEQUENT PROCESSING

As the final advancement in the RSM, recruiting goals are achieved when an applicant is enlisted or appointed into the military. However, this is not the end of the management activities performed by DFR. For the majority of full-time employment categories, the new recruit or trainee officers are sent to initial training immediately after the enlistment/appointment ceremony. Applicants enlisted or appointed into part-time employment categories can attend initial training at a later date that better suits their personal circumstances. Historically, a small percentage of recruits and officer trainees who are able to, and do, delay their attendance at initial training are discharged from the military before any training can take place. As these applicants are considered to have fulfilled a recruiting target, the processing and management that DFR is involved in beyond the enlistment/appointment ceremony is considered to be outside the scope of this report.

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VIII.   RSM TRANSITION RATES

A.   DATA COLLECTION

The RSM is a tool for integrated management of the system and subsystem process, involved in transforming an interested person into a newly enlisted recruit or a newly appointed trainee officer. It provides a succinct visual representation of the recruiting system that enables DFR staff to more thoroughly understand the recruiting system processes. The RSM also provides statistical evidence of the throughput of the recruiting system, including the extent of losses that occur throughout the recruiting process and the causes of these losses. Data are collected on every applicant who contacts DFR, whether he or she is seeking information on a military career only, or intending to submit an application for entry into the ADF. This data includes the personal characteristics of the applicants, information relating to their progression through the recruiting system, including test results, and the status of their application to join the Services.

DFR obtained data that contained the complete record of every applicant who contacted DFR between January 1, 2003 and July 16, 2006. The time period for data collection was chosen to include the enquirer and applicant records that were created after the organizational change, from Australian Defence Force Recruiting (ADFR) to DFR, was completed across Australia in mid-2002. This would prevent the inclusion of records that had been initially created using the ADFRU database and then manually migrated to the DFR database because these records had a known high level of inaccuracy. The data were provided in 28 Excel files and 44 text files with groups of files covering different phases of the recruiting system. The number of records included in this time period required that the records from certain phases of the recruiting system be broken down into multiple Excel files to overcome the 65,536 observation limit in a single Excel sheet. The data across the files were connected via a unique Candidate Identification number that is allocated to an interested person immediately upon making contact with DFR. As some applicants have multiple application records for different phases in the recruiting process, the number of observations does not reflect the number

of unique Candidate Identification numbers. The file groupings and the variables contained within the data set obtained are listed in Appendix B.

B. DATA ACCURACY

The data set included information that was surplus to that required to calculate specific transition rates in the RSM. Records that related to an applicant's application, other than his or her initial application, were removed so as not to confuse the throughput calculations of each process. Records belonging to applicants who contacted DFR after December 31, 2005 were also removed, because these applicants would have had insufficient time to advance through the recruiting system due to time, staff, and recruiting goal constraints. Records belonging to applicants who contacted DFR between January 1, 2005 and December 31, 2005 were used only for throughput calculations for the Initial Contact, JOES, and Assessment phases as it is likely that some of these applications were still progressing through the recruiting system as of July 16, 2006, and that the records would be incomplete.

The files were combined into a single data set that contained one observation for each unique Candidate Identification number. The Candidate Excel file was used as a master list for Candidate Identification numbers because, theoretically, a Candidate Identification number would appear in this file for every interested person who had contacted DFR, regardless of the progress her or she made through the recruiting system. Records for Candidate Identification numbers found in files other than the Candidate master list were removed. Records that contained obviously incorrect entries were deleted, new variables were created that better described personal characteristics, and variables were recoded for ease of data manipulation. After the editing process, 133,374 unique applicant records remained for analysis. The variable list of the edited data set is listed in Appendix C. The following discussion summarizes the treatment of data and the difficulties encountered in the process of creating the data set used for analysis.

1.   Age Variable

The original data included a variable "Date of Birth" (DOB); however, of interest was the age of the enquirer or applicant at the time of initial contact with DFR.   A variable representing the age at the time of initial contact was created by subtracting the entry for DOB from the entry for application date for each observation. The resulting age spread of observations ranged from minus 46 years old to 105.9 years old. Although it is apparent that some of these observations are incorrect and must have occurred due to a data entry error, there is no limit on the age of an enquirer. A decision was made by this author to remove from the data set any observation with an age outside of the range 10 years to 75 years.

2.   Citizenship Eligibility Variable

Applications to join the ADF can be submitted if the applicant is an Australian citizen or a permanent resident. A new binary variable was created that contained a value of 1 if an observation had a positive entry for the variable "Citizenship," or a positive entry for the variable "Permanent Resident."

3.   Education Variable

The original data set contained several variables relating to the schooling an applicant had received. Minimum education levels in the RSM are set for entry into the ADF rather than specific employment category levels. General entry non-technical applicants must have a minimum education of Year 9; general entry technical applicants must have a minimum education of Year 10; and officer entry applicants must have a minimum education of Year 12. New variables were created that represented these three minimum education levels. A record with a positive entry for the variable "Tertiary Education" was considered to have a minimum education level of Year 12, regardless of whether the level recorded for the variable "Schooling" was below this. Applicants with conflicting education levels in the original data set were recorded as having the minimum education level related to the conflicting entries.

4.   Missing Data

It was not required that each observation had an entry against every variable, because not all applicants are advanced through every event and activity in the recruiting system. However, if an observation had missing information for events or activities that the applicant should have completed, given the entries against other variables further along the recruiting process, this missing information was replaced with a "Pass" or "Complete," as appropriate.

C.   POPULATING RSM TRANSITION RATES

Once the data set was edited for accuracy, recoded and new variables generated, the progression of applicants through the recruiting system was tracked using the unique Candidate Identification numbers. This tracking was possible only because the event and activity order for each process in the recruiting system had been clearly outlined in the RSM. By progressively tracking the number of observations with data at successive events and activities, the throughput of the processes in the recruiting system was calculated. Where inadequate information on individual events or activities was available using the data set, subject matter experts from DFR were contacted so that yield, transformation, and throughput rates could be inputted into the RSM.

1.   RSM Throughput

Each unique Candidate Identification number represents the total supply (the number of interested persons) into the recruiting system. Observations in the data set with an entry against variables belonging to the JOES process are those considered to have successfully progressed through the Initial Contact process, similarly with the other processes in the recruiting system. The throughput rates for the top level of the RSM (see Figure 29) are broken down by gender and entry in Table 1.
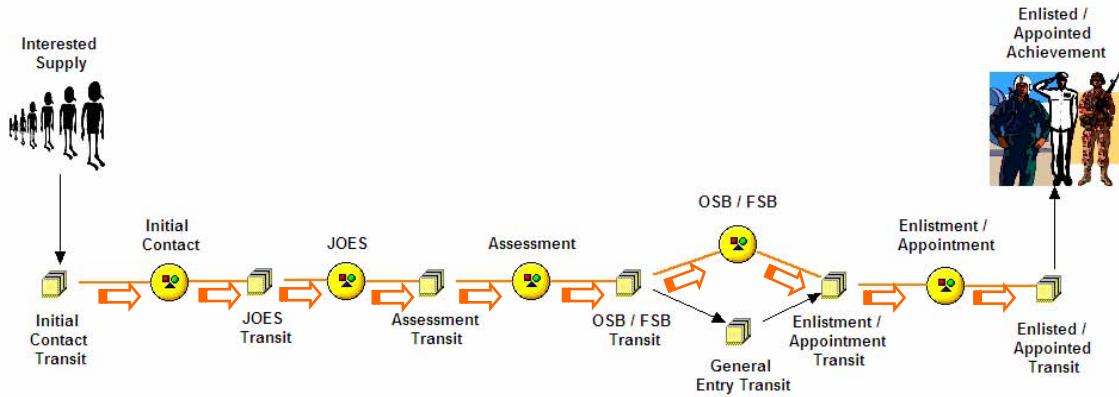
Figure 28. RSM

Male:	Male GE: 49%	Male GE: 22%	Male GE: 14%	Male GE: 13%	Male GE: 11.3%
75.84%	Male OE: 14%	Male OE: 7%	Male OE: 2.7%	Male OE: 2.6%	Male OE: 2.0%
Female:	Female GE: 42%	Female GE: 18%	Female GE: 10%	Female GE: 9%	Female GE: 5.8%
24.16%	Female OE: 16%	Female OE: 6%	Female OE: 2.7%	Female OE: 2.3%	Female OE: 1.6%
TOTAL:					
100%	**62%**	**29%**	**16%**	**14.8%**	**11.9%**

Table 1. RSM Throughput

Losses from the recruiting system occur at every process, with the number of applicant losses decreasing the further along the recruiting system that the applicant has progressed. Only 62% of the initial supply will advance through to the JOES process, 29% of the initial supply will advance through to the Assessment process, 14.8% of the initial supply will advance through to the Enlistment/Appointment process, and only 11.9% of the initial supply are eventually enlisted or appointed into the ADF. In FY 2005–06, the ADF required 8,739 new recruits or trainee officers to be enlisted or appointed to sustain the growth of the military and meet workforce planning goals. This recruiting goal would have required 10,868 applicants to have reached the Enlistment/Appointment process in the recruiting system, 21,297 applicants to have

reached the Assessment process, 45,531 applicants to have reached the JOES process, and a total of 73,437 interested persons to have contacted DFR and enquired or applied for entry into the ADF based on the historic throughput rates. Using the throughput rates for the RSM, it is possible to calculate the number of applicants who will need to be successfully progressed through the recruiting system to meet FY 2006–07 recruiting goals. Using these calculations, managers are in a position to continually monitor the supply of interested persons and forecast, with a reliable degree of accuracy, yearly achievement of ADF targets.

2. Initial Contact Throughput

Having a better understanding of the throughput required at each process is only part of the managerial benefit gained from using the RSM. By considering in greater detail the yield rates at each of the events and activities that occur within each process, it is possible for managers to better forecast the necessary resource levels and identify existing resource constraints in a timely manner. This facilitates the adjustment of those resources that are limiting throughput. The yield ratios for each activity, and the throughput rates for each event within the Initial Contact process (see Figures 29 and 30), are shown in Tables 2 and 3. These yield ratios and throughput rates were determined using historic data where possible. Where the data set did not contain the necessary information, or there were insufficient observations available for statistical calculations, subject matter experts were interviewed and their advice sought regarding the yield ratios and throughput rates they had experienced.
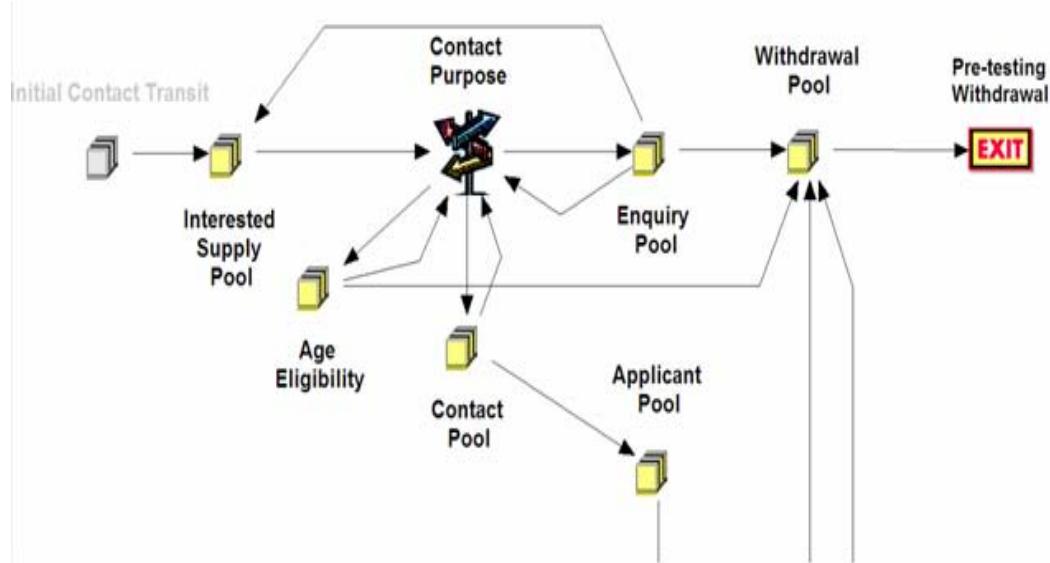
Figure 29.   Process 1: Event 1—Contact Purpose

Activity Yield Ratios

Age Eligibility	Age Old	0.2%	
	Age Young	6.2%	100%
	Age Eligible	93.6%	
Contact Pool	Applicant	92.1%	100%
	Enquirer	7.9%	
Enquiry Pool	Enquiry Withdrawal	98.3%	100%
	Re-Contact	1.7%	

Event Throughput Rate

Contact Purpose	Enquirer Withdrawal	8.4%	100%
	Applicant Progression	91.6%	

Table 2.   Process 1: Event 1—Contact Purpose Throughput

The determination of the number of DR Follow-Ups required is one example of how these throughput rates and yield ratios can be used to assess resource usage. Using FY 2005–06 recruiting goals, it was calculated that approximately 73,437 interested persons would need to contact DFR in order to achieve the desired number of enlisted or appointed applicants. Using the throughput rate for Event 1—Contact Purpose, 91.6% of

these interested persons would submit an application for entry, totalling 67,268 applicants. Of these, 24.7%, or 16,615 applicants, would require a DR Follow-Up due to their positive responses to the questions of citizenship, previous service, education level, or criminal history. Assuming that there are 51 working weeks in the year, and for simplicity, a constant application rate throughout the year, 325 applicants each week require a DR Follow-Up. Based on previous experience, each DR Follow-Up expends 20 minutes of DR time. This equates to 97.5 hours per week spent conducting DR Follow-Ups across Australia. DFR managers must factor in this resource usage when considering DR staffing levels.

Figure 30.   Process 1: Event Two—Eligibility Processing

Activity Yield Ratios

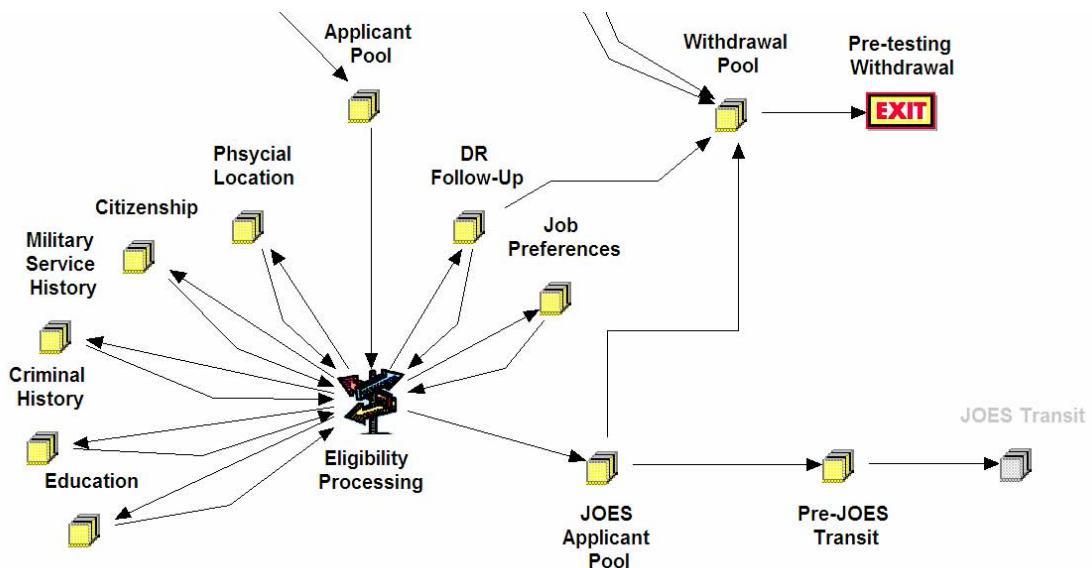|			
Physical Location	Regional	25%	100%
	Local	75%	
Citizenship	Citizen / Permanent Resident	99.7%	100%
	Non-Citizen / Non-Resident	0.3%	
Military Service	Previous Service	7.3%	100%
	No Previous Service	92.7%	
Criminal History	Criminal Background	14.6%	100%
	No Criminal Background	85.4%	
Education	Minimum Education Year 9	97.5%	100%
	Less than Minimum Education	2.5%	
DR Follow-Up	Proceed with Application	58.0%	100%
	Withdrawal	42%	
Job Preferences	Full Time	66.2%	100%
	Part Time	33.8%	
	Officer Entry	22.9%	100%
	General Entry	71.1%	
	Army	65.1%	
	Navy	13.5%	100%
	Air Force	21.4%	

Event Throughput Rate

Eligibility Processing	Withdrawal	29.7%	100%
	Applicant Progression	70.3%	

Table 3.   Process 1: Event Two—Eligibility Processing Throughput

3.   JOES Throughput

JOES is the first process where applicants physically attend a DFR location for testing. This process utilizes both facility resources and staff resources. As such, the JOES process requires a careful balance of the various resources involved, if it is not to become a bottleneck in the recruiting system. Forecasting the number of resources required for JOES process is possible, given the managers' improved understanding of the recruiting system gained by using the RSM. The yield ratios at each activity, and the throughput rates for each event within the JOES process (see Figures 31 and 32), are shown in Tables 4 and 5. These yield ratios and throughput rates were determined using

historic data, where possible, and interviewing subject matter experts where the data set did not contain the necessary information or there were insufficient observations available for statistical calculations. The first event in the JOES process, Military Record, is the only event in the recruiting system that DFR has no control or influence over. Whether an applicant with previous military service is approved to re-enlist, or re-appoint into the ADF, is the decision of the individual Service authorities.

If FY 2005–06 recruiting goals were to have been achieved in full, the throughput rate for JOES Attendance can be used to estimate the number of applicants who would have been required to be tested during the next event, JOES Testing. Approximately 49,896 applicants would need to have successfully progressed through JOES Attendance, tested for aptitude, and have a preliminary medical exam. With DFR operating only 51 weeks in the year and six days per week, this computes to 163 applicants needing to be tested and medically examined each day across Australia.
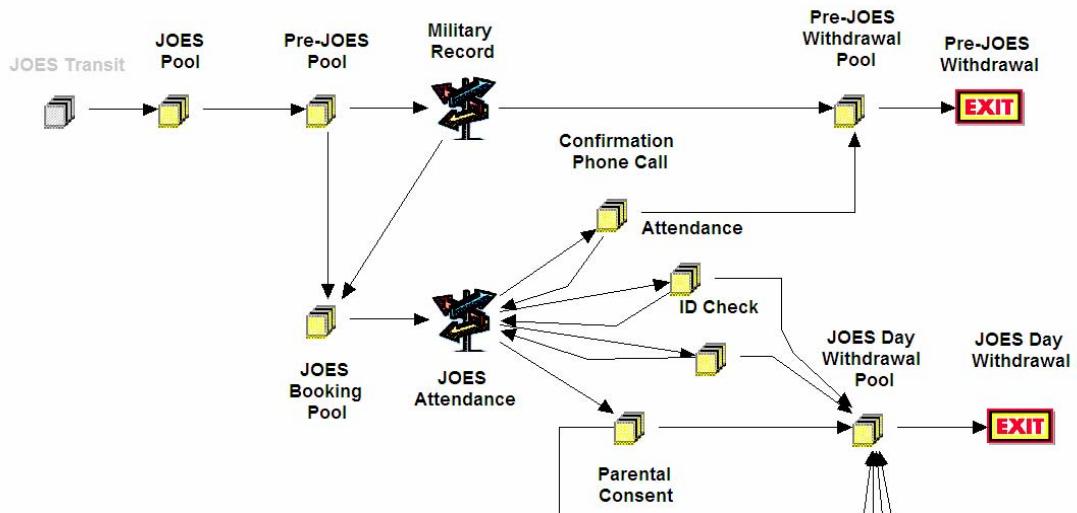
Figure 31.   Process 2: Events 1 and 2—Military Record and JOES Attendance

Military Record	Approved	54.1%	
			100%
	Not-Approved	46.9%	

Activity Yield Ratios

Confirmation Call	Applicant Progression	99%	
			100%
	Withdrawal	1%	
Attendance	Attended	71%	
	Failed to Attend	29%	100%
ID Check	ID Confirmed	93%	
	Failed ID Confirmation	7%	100%
Parental Consent	Parental Consent	98.5%	
			100%
	No Parental Consent	1.5%	

Event Throughput Rate

JOES Attendance	Applicant Progression	72%	
			100%
	Withdrawal	8%	

Table 4.   Process 2: Events 1 and 2—Military Record and JOES Attendance Throughput
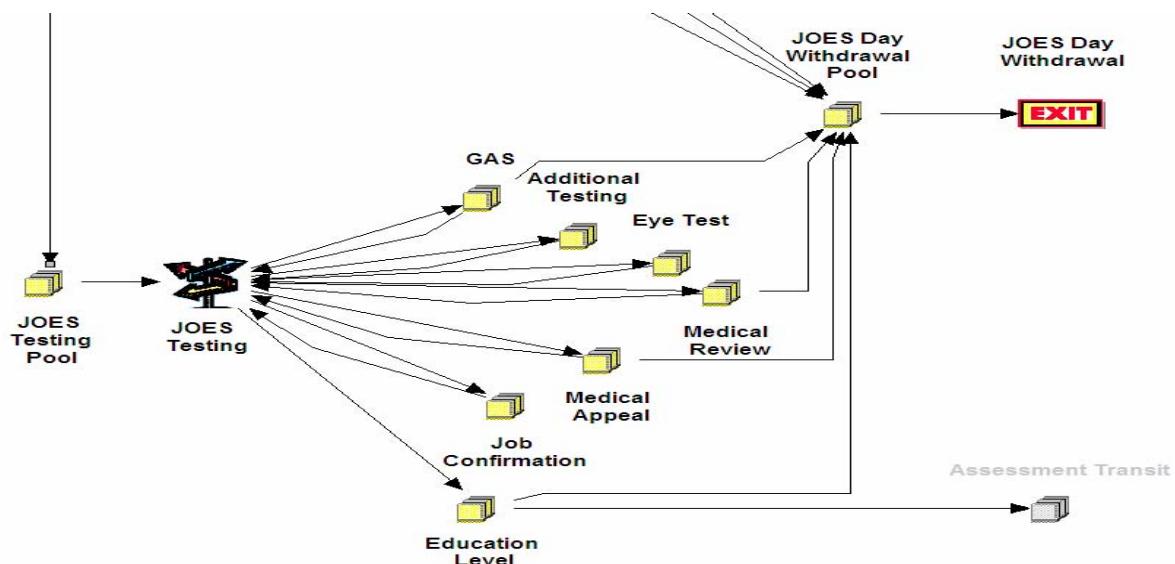
Figure 32.   Process 2: Event 3—JOES Testing

Activity Yield Ratios

GAS	BRS All Jobs	8.2%	
	GE Non-Tech Suitable	17.1%	100%
	GE Tech Suitable	37.1%	
	Officer Entry Suitable	37.6%	
Additional Testing	TAS Suitable	74.4%	100%
	TAS Not-Suitable	25.6%	
	Pilot Band 1	12.2%	
	Pilot Band 2	22.6%	
	Pilot Band 3	36.6%	100%
	Pilot Highly Suitable	6.2%	
	Pilot Unsuitable	22.4%	
Eye Test	CP 1	95.9%	
	CP 2	1.7%	100%
	CP 3	2.4%	
Medical Review	MEC 1	79.6%	
	MEC 2	0.4%	
	MEC 3M/3R/RT	14.8%	100%
	MEC 4E/4J/4W/4Q	4.7%	
	MEC AVMED/SUMU	0.5%	
Medical Appeal	Successful	54.4%	100%
	Not Successful	45.6%	
Job Confirmation	Full Time	65.7%	
	Part Time	34.3%	
	Officer Entry	20.6%	
	General Entry	79.4%	100%
	Army	64.8%	
	Navy	17.0%	
	Air Force	18.2%	
Education Level	Minimum Education	99.8%	
	Withdrawal—Less than Minimum Education	0.2%	100%

Event Throughput Rate

JOES Testing	Applicant Progression	57.2%	100%
	Withdrawal	42.8%	

Table 5.   Process 2: Event 3—JOES Testing Throughput

4. Assessment Throughput

The Assessment process, shown in Figure 33, is extremely resource intensive. The progression of applicants is structured to reduce the expenditure of resources on applicants who will not successfully advance through the recruiting system to the next process, whether that is OSB/FSB for officer entry applicants or Enlistment/Appointment for general entry applicants. Understanding the yield ratios and throughput rates of the activities and events within this process will allow managers to assess the extent of losses that are within the influence of DFR and subsequently implement courses of action that will reduce these losses.
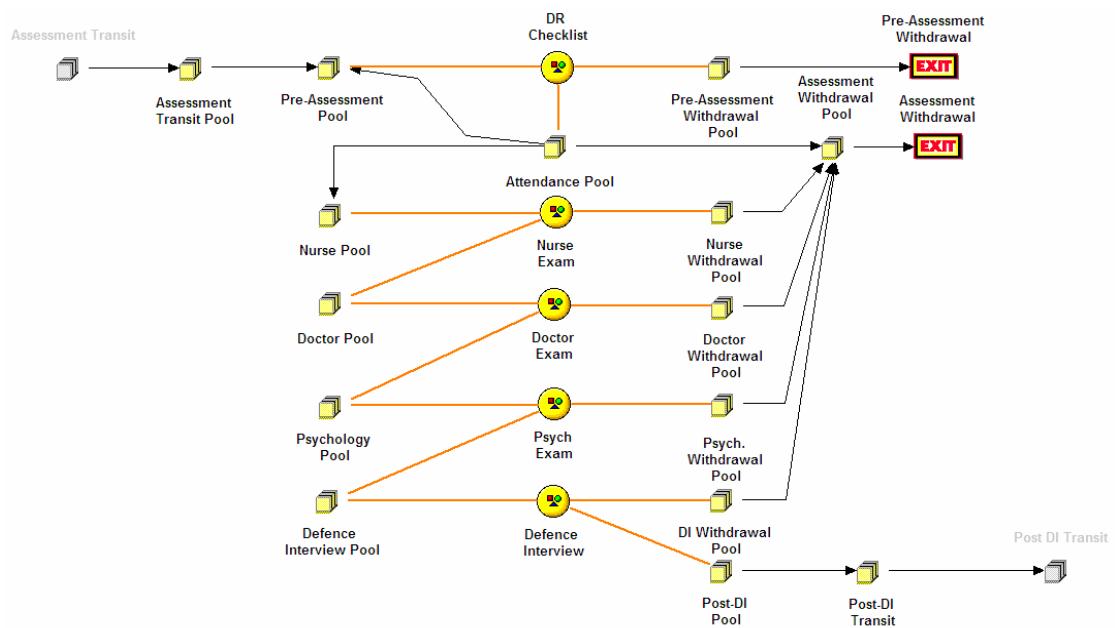
Figure 33.   Assessment Process

The throughput of the first two events in the Assessment process affects the quantity of resources that must be available if the number of applicants necessary to meet recruiting goals are to be advanced through the recruiting system without the Assessment process becoming a bottleneck. From earlier calculations, 21,297 applicants should have been successfully progressed through the recruiting system and been booked to an assessment date if FY 2005–06 recruiting goals were to have been achieved in full. This means that 21,297 applicants must be contacted by their DR prior to their assessment date so that their preparedness for the Assessment process can be evaluated. The DR

Checklist takes, on average, approximately 30 minutes to conduct. This equates to 209 DR hours spent each week, across Australia, conducting DR Checklist interviews. The throughput rates for the first and second events in the Assessment process (see Figure 34) are shown in Table 6.
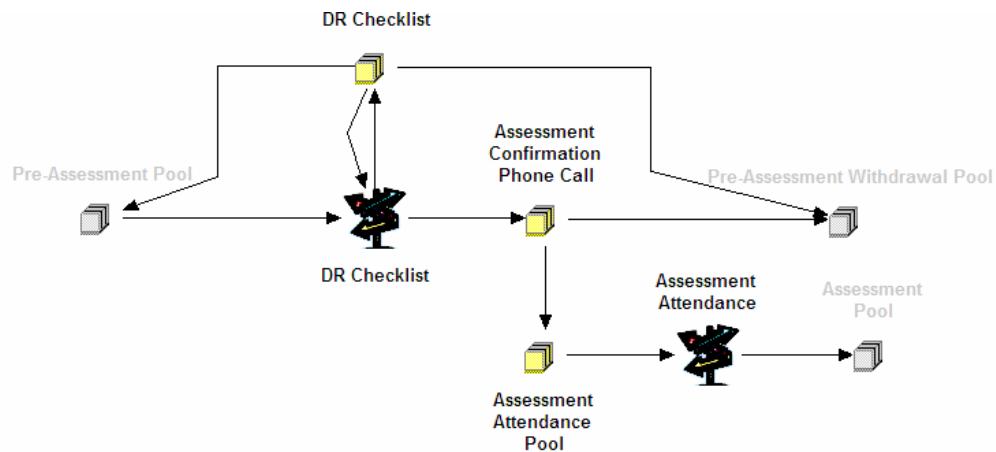
Figure 34.   Process 3: Event 1 and 2—DR Checklist and Assessment Attendance

Event Throughput Rate			
DR Checklist	Approved to Proceed	95.6%	100%
	Not Approved to Proceed	4.4%	
Event Throughput Rate			
Assessment Attendance	Applicant Progression	86.7%	100%
	Withdrawal	13.3%	

Table 6.   Process 3: Event 1 and 2—DR Checklist and Assessment Attendance Throughput

Based on the throughput rates from DR Checklist and Assessment Attendance events, DFRs must be capable of evaluating the 17,652 applicants who are estimated to actually attend their assessment booking, if FY 2005–06 recruiting goals were to be achieved. The yield rates and throughput ratio for the third event in the Assessment process, Nurse Preliminary (see Figure 35), are shown in Table 7. It can be expected that 6.4% of all applicants who attend their assessment booking will withdraw from the recruiting process after the Preliminary Nurse Exam, by their own choice, based on the

results from the medical examinations they have undergone. This statistic, in terms of the number of applicants required to be processed in order to have met FY 2005–06 recruiting goals, indicates that 1,130 applicants will withdraw after the Nurse Preliminary event is completed and that only 16,522 applicants will remain for the Doctor Examination, Psychology Interview, and Defence Interview events. These figures represent all applicants across Australia and can be broken down by State expectations for DFR managers based on historic distribution of applicants' physical addresses and State recruiting goals.
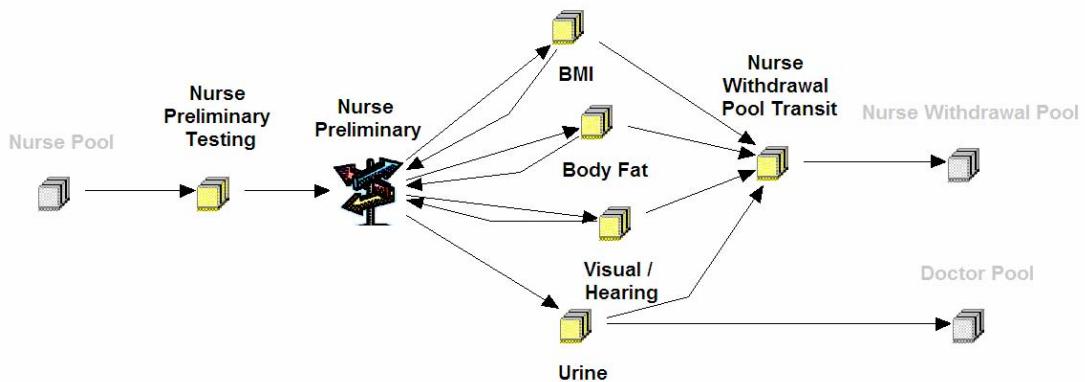
Figure 35.   Process 3: Event 3—Nurse Preliminary

Activity Yield Ratios

BMI	BMI Acceptable	86.1%	
	BMI Unacceptable— Body Fat	3.8%	100%
	BMI Unacceptable—Withdrawal	10.1%	
Body Fat	Body Fat Normal	79.9%	
	Body Fat High/Low	20.0%	100%
	Body Fat Withdrawal	0.1%	
Visual / Hearing	Proceed	94.5%	
			100%
	Issues Raised	4.5%	

Event Throughput Rate

Nurse Preliminary	Applicant Progression	93.6%	
			100%
	Withdrawal	6.4%	

Table 7.   Process 3: Event 3—Nurse Preliminary Throughput

As with withdrawals from the Nurse Preliminary event, withdrawals from the Doctor Examination event are not advanced further through the recruiting system, because to do so would be wasting valuable DFR resources on applicants who will not be successful in their application to join the military. The yield ratios and throughput rate for the Doctor Examination event (see Figure 36) are shown in Table 8. Based on the historic data used for the yield and throughput calculations, only 84.3% of applicants who are advanced through to the Doctor Examination continue in the recruiting process. Much of this loss occurs when applicants requiring specialist medical testing fail to attend the specialist appointment made for them by DFR.
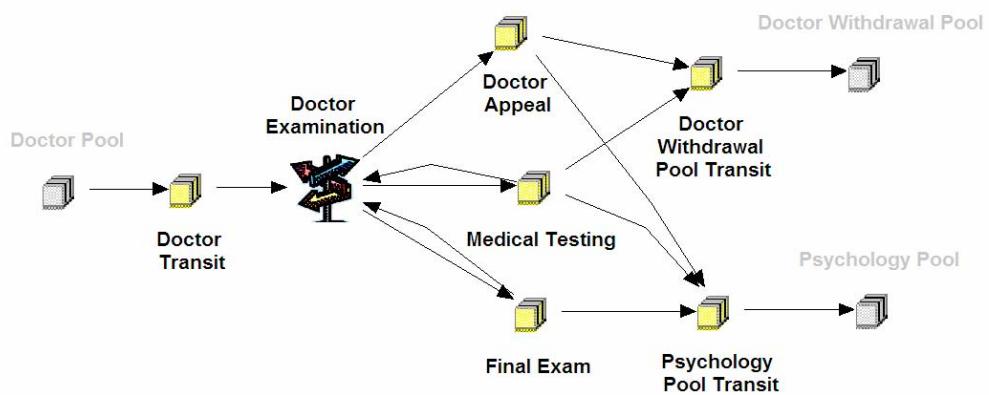
Figure 36.   Process 3: Event 4—Doctor Examination

Activity Yield Ratios			
ELME	MEC 1	76.7%	
	MEC 2	0.6%	100%
	MEC 3	16.1%	
	MEC4/4W	6.6%	
Specialist Testing	Results Reviewed	58%	100%
	Testing Not Conducted	42%	
Doctor Appeal	Appeal Successful	2.1%	100%
	Appeal Unsuccessful	97.9%	
Event Throughput Rate			
Doctor Examination	Applicant Progression	84.3%	100%
	Withdrawal	15.6%	

Table 8.   Process 3: Event 4—Doctor Examination Throughput

The yield ratios and throughput rate of the fifth event in the Assessment process, Psychologist Interview (see Figure 37), are shown in Table 9. Historically, the loss from this event is minimal when compared with other events in the Assessment process. However, knowledge of the throughput rates will help managers plan Defence Interview staffing levels so that instances of applicants having to return for a second assessment date, due to insufficient staffing levels, can be eliminated.
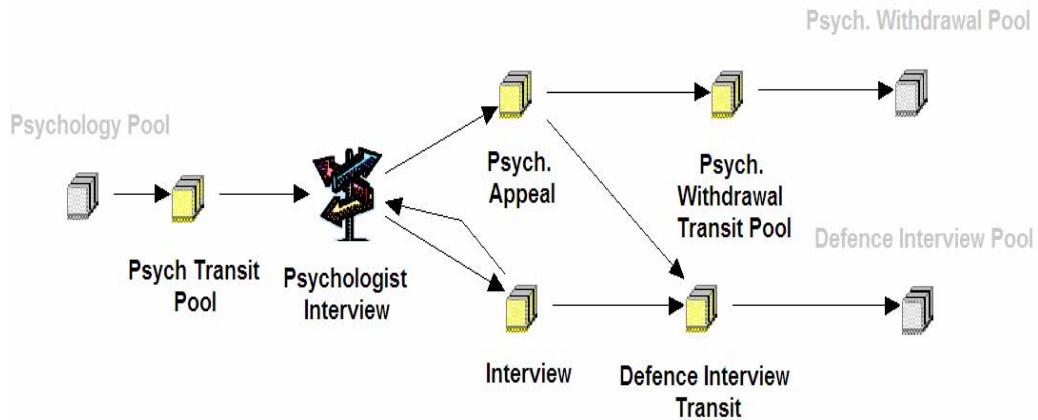
Figure 37.   Process 3: Event 5—Psychologist Interview

Activity Yield Ratios

Interview	Psychologically Unsuitable	1.8%	
	Psychologically Not Recommended	23.6%	100%
	Psychologically Recommended	74.6%	
Psychology Appeal	Appeal Successful	16.7%	100%
	Appeal Unsuccessful	83.3%	

Event Throughput Rate

Psychologist Interview	Applicant Progression	98.2%	100%
	Withdrawal	1.8%	

Table 9.   Process 3: Event 5—Psychologist Interview Throughput

Losses from the Defence Interview event are costly for DFR in terms of resources expended on applicants to advance them to this stage in the recruiting system.   By reviewing the yield ratios for the different activities, managers are in a position to better

direct efforts at improving the number of acceptable applicants successfully advanced through the recruiting system. The yield ratios and throughput for the sixth event in the Assessment process (see Figure 38), is shown in Table 10.
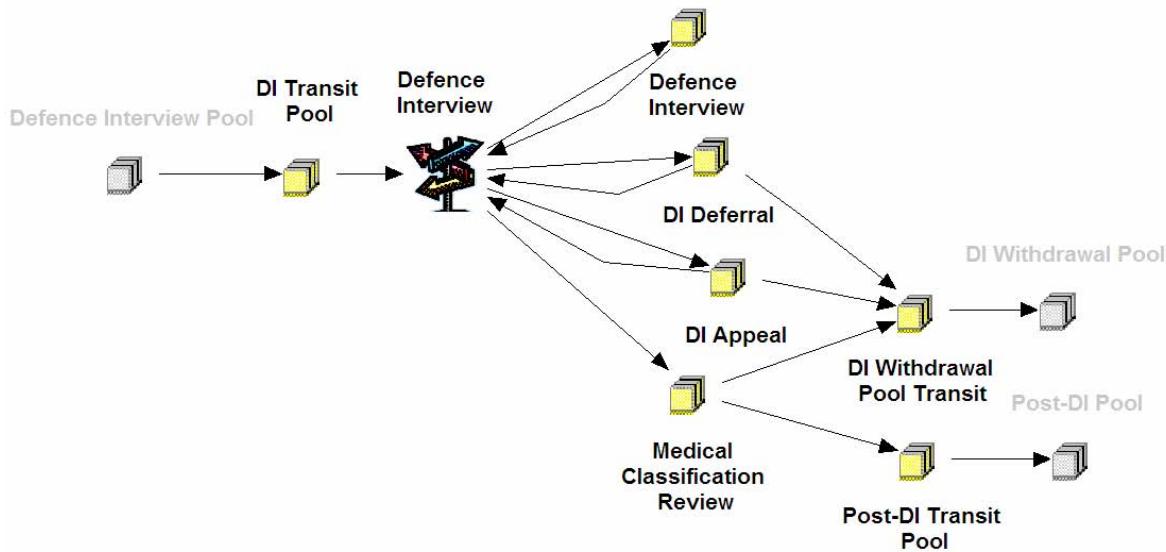
Figure 38.   Process 3: Event 6—Defence Interview

Activity Yield Ratios

Interview	Not Recommended	1.2%	
	Deferred	18.9%	100%
	Recommended	79.9%	
DI Deferral	Recommended	35%	100%
	Not Recommended	65%	
DI Appeal	Appeal Successful	59.6%	100%
	Appeal Unsuccessful	40.4%	
Medical Classification	Suitable for Enlistment/Appointment	94.4%	100%
	Not Suitable for Enlistment/Appointment	5.6%	

Event Throughput Rate

Defence Interview	Applicant Progression	87.4%	100%
	Withdrawal	12.6%	

Table 10. Process 3: Event 6—Defence Interview Throughput

5.   OSB/FSB Throughput

Nearly 80% of DFR recruiting goals for FY 2005–06 are for general entry positions, yet it is officer entry achievement that is of greatest concern to DFR managers. In previous years, officer entry achievement for the FY has been less than 75%, compared to 85% for general entry achievement. Using the RSM, managers can study in depth the causes of losses from the recruiting system for officer entry applicants alone, and develop courses of actions that are specific to this avenue of entry into the ADF. The yield ratios and the throughput rate for the fourth process in the recruiting system, OSB/FSB (see Figure 39), are shown in Table 11. It must be noted that losses from the OSB/FSB booking event are currently influenced by the low number of applicants historically progressed to this stage in the recruiting system; if throughput numbers of officer entry applicants were to increase, this individual yield ratio is likely to change as entry becomes more competitive.
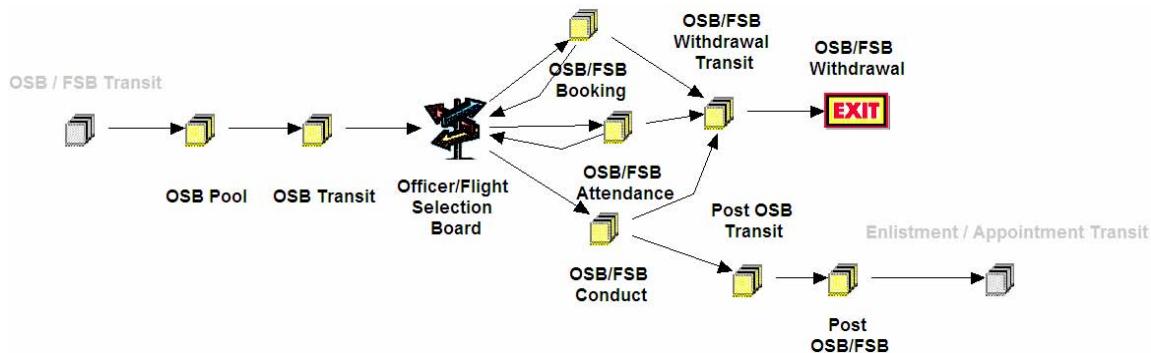

Figure 39.   Process 4: Event 1—Officer/Flight Selection Board

<u>Activity Yield Ratios</u>

OSB/FSB Booking	Booking Completed	98.0%	100%
	Booking Not Completed	2.0%	
OSB/FSB Attendance	Attended	92.0%	100%
	Failed to Attend	8.0%	
OSB Conduct	Recommended	78.4%	
	Deferred	6.1%	100%
	Not Recommended	15.5%	
FSB Conduct	Suitable	80.1%	100%
	Not Suitable	19.9%	

<u>Event Throughput Rate</u>

OSB/FSB	Applicant Progression	86.2%	100%
	Withdrawal	13.8%	

Table 11. Process 4: Event 1—Officer/Flight Selection Board Throughput

In FY 2005–06, a total of 1,758 applicants had to be appointed into the ADF to achieve recruiting goals. This number is further broken down into 1,136 full-time positions and 633 part-time positions. Based on the RSM throughput rates shown in Table 1, the output from the OSB/FSB process would have needed to be 2,187 applicants successfully recommended for appointment at OSB or FSB. Using the full-time and part-time breakdown and the yield rates shown in Table 11, it is possible to calculate the number of OSB/FSB vacancies required so that there are sufficient board opportunities to evaluate the suitability of officer entry applicants to have met FY 2005–06 recruiting goals for officer avenues of entry. The RSM assists managers in determining that 1,803 fulltime and 1,005 part-time OSB/FSB opportunities would be required, at a minimum, to meet FY 2005–06 officer entry recruiting goals.

6.   Enlistment/Appointment Throughput

Losses   from   the   fifth   and   final   process   in   the   recruiting   system, Enlistment/Appointment, are the most costly for DFR, as applicants who have advanced to this stage have had more resources expended on them than other applicants. Understanding both the causes of losses from this process and the rates of losses by using

the RSM allows DFR managers to target activities and events for courses of action that will have the greatest effect on increasing recruiting goal achievement. The yield ratios and the throughput rates of the activities and events in the Enlistment/Appointment process (see Figure 40), are shown in Figure 12.
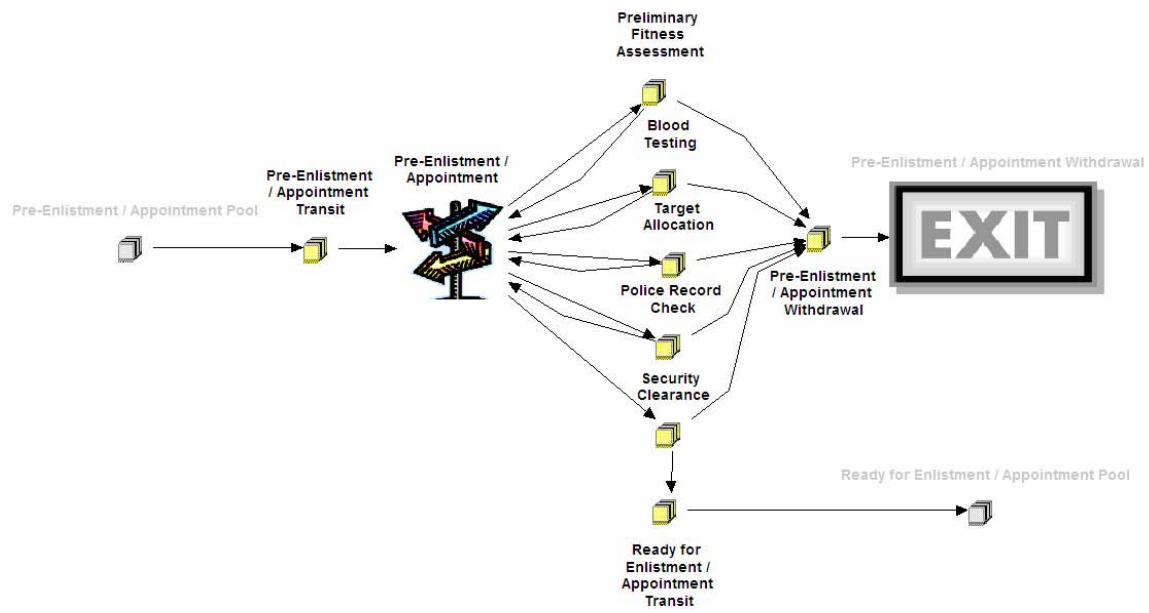

Figure 40.   Process 5: Event 1—Pre-Enlistment/Appointment

Activity Yield Ratios

PFA	Pass	79.0%	
	Fail	6.4%	100%
	Re-attempt	14.6%	
Blood Testing	Pass	99.5%	100%
	Fail	0.5%	
Target Allocation	General Entry Allocated	91.6%	100%
	General Entry Not Allocated	8.3%	
	Officer Entry Allocated	81.8%	100%
	Officer Entry Not Allocated	18.2%	
Police Record	Pass	99.9%	100%
	Fail	0.1%	
Security Clearance	Package Completed	99.9%	100%
	Package Not Completed	0.1%	

Event Throughput Rate

Pre-Enlistment/Appointment	Applicant Progression	78.6%	100%
	Withdrawal	21.4%	

Table 12. Process 5: Event 1—Pre-Enlistment/Appointment Throughput

The yield ratios and throughput rate for the second event in the final process in the recruiting system, Enlistment/Appointment (see Figure 41), are shown in Figure 13. Using the RSM to understand the extent of losses from this event is of great importance, as these losses cannot be recovered. A loss from this event has a direct one-on-one negative correlation with the achievement of recruiting goals.
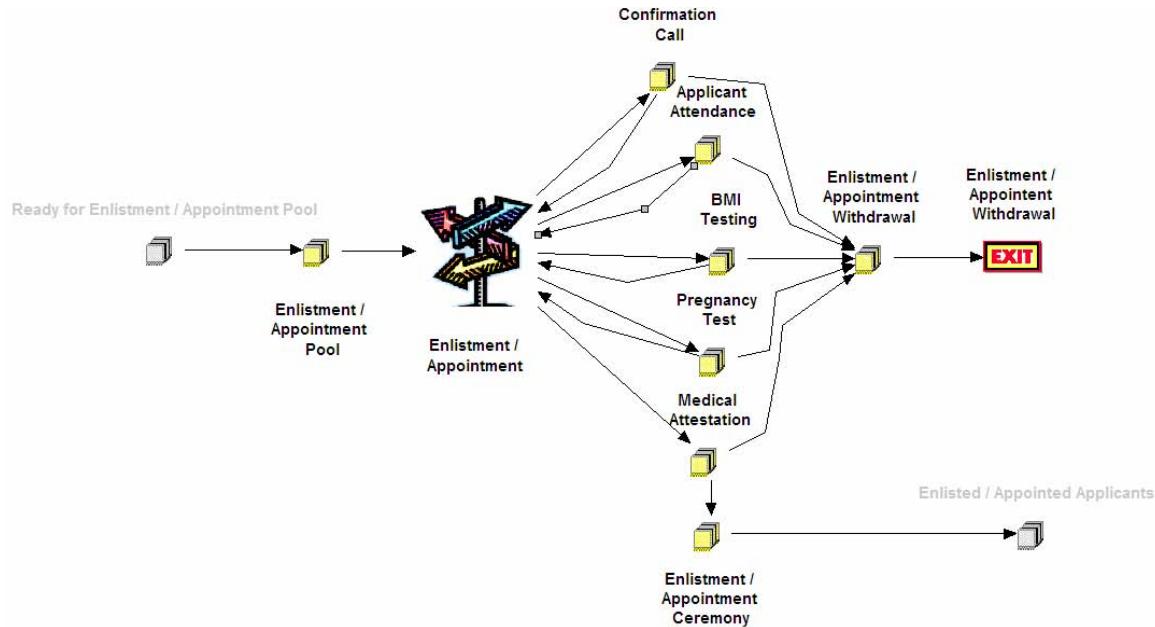
Figure 41.   Process 5: Event 2—Enlistment/Appointment

Activity Yield Ratios

Confirmation Call	Attendance Confirmed	94.0%	100%
	Applicant Withdrawal	6.0%	
Attendance	Attended	98.3%	100%
	Failed to Attend	1.7%	
BMI Testing	BMI Acceptable	99.96%	100%
	BMI Unacceptable	0.04%	
Pregnancy Testing	Positive Result	0.02%	100%
	Negative Result	99.98%	
Medical Attestation	MEC 1	98.96%	100%
	MEC 2	0.75%	
	MEC 3	0.23%	100%
	MEC 4	0.06%	

Event Throughput Rate

Enlistment/Appointment	Enlistment/Appointment Achievement	97.3%	100%
	Withdrawal	2.7%	

Table 13. Process 5: Event 2—Enlistment/Appointment Throughput

D.   ISSUES

Courses of action can affect the achievement of recruiting goals by targeting two separate causes of applicant withdrawals from the recruiting system: withdrawals due to the eligibility and suitability standards set by Defence, and withdrawals due to the structure and organization of the recruiting system. The yield ratios and throughput rates calculated can immediately be used by DFR managers to address the later cause of applicant withdrawals and assist in the development of courses of action that will positively affect the achievement of recruiting goals. The yield ratios and throughput rates calculated should not be used in isolation to address the former cause of applicant withdrawals. Rather, the yield ratios and throughput rates should be used to direct further study before any courses of action that modify the eligibility and suitability standards set by Defence are developed.

IX.   SUMMARY AND RECOMMENDATIONS

A.   SUMMARY

The recruiting system is the first step in the generation of Defence capability. Having an efficient and effective recruiting system is essential to providing the right people in the right numbers at the right time as determined by Defence Workforce Planning. The ability of DFR to achieve its mission is impaired when there are inadequate tools available to support highly successful management of the recruiting process and inadequate resources utilized. The current operational model, shown in Figure 2, is inadequate to facilitate efficient and effective levels of managerial understanding of the recruiting system which are necessary for assessment and analysis of resource utilization, process capacity limitations, and other constraints that affect the system throughput and achievement of recruiting goals.   Changing population demographic trends and the operational tempo of the ADF are combining to negatively affect the supply of interested applicants into the recruiting system.
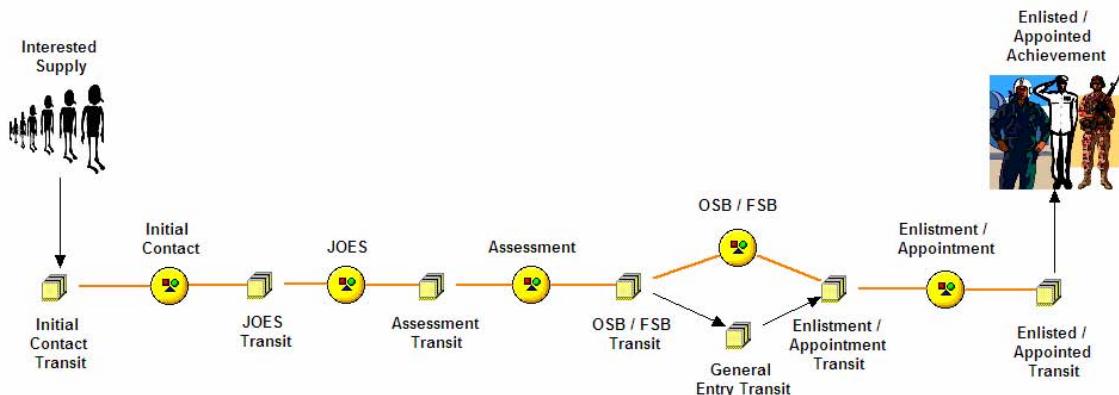
Figure 42.   RSM

The RSM developed during this study, the top level of which is shown in Figure 42, is a tool for Defence and DFR managers at all levels that enriches their ability to assess, analyze, and improve the recruiting system. The primary purpose of the RSM is to clearly define each of the processes and events within the recruiting process so that their individual and collective performance can be measured and evaluated. The RSM can assist in the development of courses of action that will increase the throughput of the

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recruiting system by improving operational efficiency. At the senior managerial level the use of the RSM will facilitate analysis of the impacts of both proposed policy amendments and proposed resource changes. An operational RSM will support timely and more accurate assessments of the impact of changes in the external and internal environment that cause fluctuations in the supply of candidates interested in pursuing a military career. At the Area and Branch managerial levels of DFR, the use of the RSM will assist in the identification of objectives, constraints, and alternative courses of action that will improve the output of individual process and the recruiting system as a whole. The RSM is also a simple tool that can be used to improve DFR staff awareness of processes and events outside of their area of expertise. This improved level of staff knowledge will have positive benefits on the numerous interactions occurring within the recruiting system.

The RSM can be used to enhance coordination between managers, team leaders, and senior staff by providing a single model that encompasses the entire recruiting system. Each manager, team leader, and senior staff member can easily recognize the association between his or her area of responsibility and that of another, allowing greater cross-functional command and control. This in turn fosters improved sharing and utilization of facility, financial, and personnel resources with the objective of boosting system throughput and the subsequent achievement of Defence target goals. Improved understanding of the complex interaction that exists between processes, gained through the use of the RSM, will reduce instances of the unintended consequences one manager's actions and decisions can have on other processes outside of his or her immediate command. The throughput rates used in the RSM, based on subject-matter expert's opinions and historic data analysis, provide a guide to the current recruiting system throughputs and highlights areas of concern.

B.   RECOMMENDATIONS

Continual effective management of the recruiting system is vital if recruiting goals are to be achieved at levels that sustain the generation of Defence capability. Management of the recruiting system and the processes within consists of three phases: process assessment, process analysis, and process improvement. Process assessment

involves clearly defining a process, and measuring and evaluating its performance. This study has completed the first phase involved in managing the recruiting system. The RSM clearly defines the recruiting system and the processes involved that transform candidates interested in a military career into recruits and trainee officers newly enlisted or appointed into service in the ADF. The performance of the recruiting system is evident from the level of target achievement that has been accomplished in previous years; this performance is well below the standard necessary to achieve the DFR mission. Using the RSM to review, in detail, the five processes in the recruiting system has highlighted the fact that each process has throughput constraints that if removed or modified could increase the process capacity, and that doing so would boost DFRs' attainment of recruiting goals.

Process analysis is the second phase in system management and involves gaining a detailed understanding of the processes within a system, conducting an analysis of the processes, and generating a plan for process and system improvement. Visually, the RSM is a process flow diagram that details the events and activities occurring in the five processes of the recruiting system. It indicates the inputs, transformations, and outputs at every activity, event, and process. Technically, the RSM is a tool that allows the performance evaluation at each process to be analyzed further so that bottlenecks, capacity constraints, resource utilization, and the value added at each event and activity are identified. This analysis will reveal possible courses of action that can be developed in depth by DFR managers. As the RSM is a three-dimensional computational representation of the recruiting system, the improvement plans developed can be tested for feasibility and desirability through simulation rather than implementation. The benefit of simulation is that the improvement plans can be revised as necessary, and then retested, prior to system-wide physical implementation of the courses of action deemed effective, which is the third and final phase of system management.

1.   Software Purchase

A software program capable of EM is essential to conducting process analysis in a timely manner and producing dependable simulation of the results of multiple courses of action across the breadth of processes within the ADF recruiting system. As a leading

developer of proprietary network applications that focus on decision-making and process optimization, River Logic is a proven company with global clients in fields such as industrial manufacturing, consulting, process manufacturing, logistics, and recruiting. River Logic's core application, Enterprise Optimizer, is being used by a European building products company to determine the competitive impact of market and pricing decisions. In addition, a leading consumer products company is modeling the financial impact of sourcing decisions, and the US AAC is analyzing logistics and optimizing recruiting. Georgia-Pacific uses Enterprise Optimizer to make strategic decisions; Pepsi uses Enterprise Optimizer to optimize procurements. Even Australian companies such as Lion-Nathan (alcoholic beverages) and Orica (mining and chemical industry) have used the software program to assist in operations.

The ADF can use Enterprise Optimizer to answer the following questions:

a.   How do market changes that influence interested candidate supply affect recruiting goal achievement?

b.   How should resources such as staff and facility use be allocated across the recruiting system processes?

c.   What entrance standard policy changes would be most effective in reducing applicant withdrawals from the recruiting system?

d.   What is the most profitable employment category to enlist or appoint to?

e.   How can the recruiting schedule (timeliness to process applicants) be modified to meet changing recruiting goals?

f.   Which activities and events are duplicated across processes and do not add value to the recruiting system?

g.   Given recruiting goals, what resources are required to enable the timely processing of applicants?

Purchasing Enterprise Optimizer from River Logic will enable the existing RSM to be expanded on without having to duplicate the model using an alternative software program. In view of the fact that Enterprise Optimizer is available as a subscription purchase for $5,000 per month, DFR has the flexibility to maintain a license during certain periods of the year where the RSM developed will be utilized more frequently, or DFR could purchase a permanent license so that managers can make use of the program capabilities to assist in decision making at any time.

2.   Data Analysis

Analyses of the data have identified the historic performance of all processes, events, and activities that form the ADF recruiting system. This has facilitated the detection of any bottlenecks or capacity constraints and ascertained the extent and causes of losses from the recruiting system. Using the RSM developed to understanding the historic throughput of the recruiting system has located key areas that require improvement such as the throughput rate of the Initial Contact, JOES and Assessment processes. It will assist in prioritizing the efforts of DFR managers in developing courses of action that will increase throughput and boost recruiting goal achievement. This historic analysis has supplemented the transformation ratios obtained from subject-matter expert opinions on recruiting throughputs. In order for the effects of courses of action to be simulated, it is important that the historic characteristics of applicants is known in addition to the throughput rates already determined. Conducting detailed data analysis on DFR applicants will allow the following questions to be answered using the RSM as a facilitation tool:

a.   Are the losses from the recruiting system within the control of DFR?

b.   Are the losses from the recruiting system a result of entrance standards or system issues?

c.   What policies are affecting applicant progression?

d.   What would the effect of changing various entrance standards have on applicant throughput?

e.   Which policy and system changes would have the greatest effect on system output?

f.   Given existing throughput, what system supply is needed to meet system demand?

g.   What resources are required to process the supply necessary to meet system demand with the existing throughput?

h.   What resource constraints are delaying applicant progression?

Conducting detailed data analysis will provide information that can be used in additional studies to review both recruit and trainee officer progression through initial training and beyond. This will provide supplementary insight into the effect that both recruiting policy and system changes will have on training units and operational units in

the ADF. There is little long-term effect on workforce strength to be gained if recruiting goals are achieved at the cost of initial training goals. Policy changes such as reducing the GAS for officer entry may seem beneficial by increasing recruiting throughput but could have unintended consequences on success rates at officer training establishments. Having recruiting system data available for analysis is essential to reducing unintended consequences of implementing courses of action in the recruiting system.

C.   CONCLUSION

The use of Enterprise Optimizer to build an RSM has provided a unique tool for DFR staff at all levels to better understand and manage the recruiting system. The RSM can assist in decision making aimed at improving achievement of recruiting goals and provides an innovative technique to forecast supply and demand effects on DFR resources. If the RSM developed in this study is implemented as a replacement to the existing operational model of the recruiting system, the immediate benefits gained include greater understanding of the recruiting system by DFR staff at all levels, improved cross-process functionality, and enhanced management. If further analysis is conducted on historic applicant data and a full license for Enterprise Optimizer is purchased, the payoffs include gaining a creative simulation and forecasting capability, determining options to streamline the recruiting system, and computerized support for strategic and tactical decision making. The demands placed on DFR managers to increase the efficiency and effectiveness of the recruiting system due to fluctuating market demographics and characteristics and the operational tempo of the ADF require a rapid response if the downward trend of recruiting achievement is to be turned around. The RSM provides DFR with the ability to implement measures that will have a positive effect on the recruiting system output with a confidence not previously seen, in a timely manner that was previously unattainable.

APPENDIX A

EXPLANATION OF TERMS

131901	Australia-wide phone number for DSC
AAC	Army Accessions Command
Ab initio	Name given to applicants who are not currently employed by any military forces, either in Australia or other countries
ADF	Australian Defence Force
ADFR	Australian Defence Force Recruiting
AGC	Army General Classification
Appeal	Name given when an applicant submits an appeal of any decision made by DFR staff regarding their eligibility to join the ADF
Applicant	Name given to interested person who has contacted DFR and formally submitted an application for entry into the ADF
APROM-E	Accessions Process Optimization Model—Active Enlisted
BMI	Body Mass Index
Body Fat Percentage	Percentage of human body that is comprised of body fat
CMA	Career Management Agency
CMO	Chief Medical Officer
COTS	Commercial-of-the-Shelf
CP	Color Perception
CRA	Compulsory Retirement Age
Deferral	Name given when an application is deferred for a period of time by DFR staff
DFR	Defence Force Recruiting
DGDFR	Director General Defence Force Recruiting
DGWP	Director General Workforce Planning
DI	Defence Interviewer
DR	Defence Recruiter
DSC	Defence Service Centre

EAL	Maximum Entry Age
ELME	Entry Level Medical Examination
EM	Enterprise Modeling
Enquirer	Name given to interested person who has contacted DFR and requested further information on a career in the ADF without submitting an application for entry into the ADF
EO	Enterprise Optimizer®
Fit-for-Entry	Classification given to an applicant who is medically suitable for entry into the ADF
FSB	Flight Screening Board
GAS	General Aptitude Score
General Entry	Employment category for all job positions that require enlistment
IMPS	Initial Minimum Period of Service
JOES	Job Option Evaluation Session
MAT	Management Analysis Technologies
MEC	Medical Examination Class
MHQ	Medical History Questionnaire
MO	Medical Officer
MVR	Minimum Visual Requirement
NO	Nursing Officer
NPS	Naval Postgraduate School
Officer Entry	Employment category for all job positions that require Appointment
OSB	Officer Selection Board
PFA	Preliminary Fitness Assessment
Pilot Score	Score given to applicants sitting pilot testing
PMKeyS	Computer system used by the ADF to electronically manage military personnel
PowerForce	Computer system used by DFR to electronically manage applicants into the ADF
PTI	Physical Training Instructor
RAAF	Royal Australian Air Force

RLO	Regional Liaison Officer
ROSO	Return of Service Obligation
RSM	Recruiting System Model
TAS	Technical Aptitude Score
Tri-Service	Army, Navy and RAAF
Wavier	Name given when an entrance standard is waived to allow entry into the ADF
www	www.defencejobs.gov.au

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APPENDIX B

DATA FILES AND VARIABLES OBTAINED FROM DFR

File Name	Total Files in Group	Total Observations in Group	Recruiting Process / Event encompassed	Variables Included
Appeals	1	1,316	Appeals and Waivers	- Candidate Identification - Application Number - Total Number of Applications - Appeal Type - Appeal Category - Appeal Initiated - Appeal Finalised - Appeal Outcome
Candidate	5	213,626	Initial Contact / JOES / Assessment / OSB / FSB / Police Check	- Candidate Identification - Application Number - Create Date - Gender - DOB - Post Code - Job Preference 1 Title - Job Preference 1 Service - Job Preference 1 Service Type - Job Preference 1 Entry Type - Job Preference 1 ADFA Degree Type - Job Preference 1 Initial Medical Class

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
Candidate (cont)	5	213,626	Initial Contact	• Job Preference 1 Medical Class • Job Preference 1 Psychology Rating • Job Preference 1 Suitability • Job Preference 1 DI Result • Job Preference 1 OSB Result • Job Preference 1 FSB Result • Job Preference 1 Additional Testing Required • Job Preference 1 Psychology Military Compatibility • Job Preference 1 Psychology Training Potential • Job Preference 1 DI Training Potential • Job Preference 2 Title • Job Preference 2 Service • Job Preference 2 Service Type • Job Preference 2 Entry Type • Job Preference 2 ADFA Degree Type • Job Preference 2 Initial Medical Class

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
Candidate (cont)	5	213,626	Initial Contact	• Job Preference 2 Medical Class • Job Preference 2 Psychology Rating • Job Preference 2 Suitability • Job Preference 2 DI Result • Job Preference 2 OSB Result • Job Preference 2 FSB Result • Job Preference 2 Additional Testing Required • Job Preference 2 Psychology Military Compatibility • Job Preference 2 Psychology Training Potential • Job Preference 2 DI Training Potential • Job Preference 3 Title • Job Preference 3 Service • Job Preference 3 Service Type • Job Preference 3 Entry Type • Job Preference 3 ADFA Degree Type • Job Preference 3 Initial Medical Class

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
Candidate (cont)	5	213,626	Initial Contact	• Job Preference 3 Medical Class • Job Preference 3 Psychology Rating • Job Preference 3 Suitability • Job Preference 3 DI Result • Job Preference 3 OSB Result • Job Preference 3 FSB Result • Job Preference 3 Additional Testing Required • Job Preference 3 Psychology Military Compatibility • Job Preference 3 Psychology Training Potential • Job Preference 3 DI Training Potential • Marital Status • Dependants Children Total • Language Most Fluent • Exercise Regular • Application Reason • Information Request Only • ADFA Flag

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
Candidate (cont)	5	213,626	Initial Contact	• Underage ADFA Scholarship Flag • Australian Citizen • Nationality • Permanent Resident • Nationality Previous • Aboriginal • TSI • Previous Service Flag • Previous Service • Previous Service Type • Still Serving • Cadets Service Flag • Cadet Service Type • Cadet Start Date • Cadet End Date • Previous Service Rank • Offences • Correctional Centre • Tertiary Qualifications • School Certificate • Grade Completed • HSC • HSC Completed • Dispatch To Police Date • Suitable • Waiver Required • Waiver Received

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
DefInt	1	59,212	Defence Interview	• Received From Police Date • Candidate Identification • Application Number • Total Number of Applications • DCO Interview Required • Notice Required (weeks) • Notice Required (days) • Waiver Comments • Waiver Approved • Waiver Approved Date
DefRecInt	2	99,378	DR Interview	• Candidate Identification • Application Number • Total Number of Applications • Interview Date • Result • Defer Date
DocStages	44	2,114,784	General	• Candidate Identification • Application Number • Stage • Action • Stage Date • Stage Time

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
Jobs	7	396,191	Job Preferences / Assessment Day Event Results	• Candidate Identification • Application Number • Job Title • Service • Service Type • Entry Type • ADFA Degree Type • Job Preference Order • Additional Testing Required • Medical Initial Class • Medical Class • Specialist Suitability • Psychology Rating • DI Result • OSB Result • FSB Result • Psychology & Military Compatibility • Psychology Training Potential • DI Training Potential
MedAttest	1	29,506	Medical Attestation	• Candidate Identification • Application Number • Total Number of Applications • Medical Attestation Number • Assessment Date • BMI

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
MedAttest (cont)	1	29,506	Medical Attestation	- PUHLEEMS_P - PUHLEEMS-U - PULHEEMS_L - PULHEEMS_H - PULHEEMS_M - PULHEEMS_S - Colour Perception Score - Fit For Entry - Attestation Medical Class
MedHist	5	277,429	MHQ / Preliminary Medical Exam	- Candidate Identification - Application Number - Medical History Rejection Reason - Nurse Result - Doctor Result
MedPrelim	2	71,683	Preliminary Medical Exam	- Candidate Identification - Application Number - Total Number of Applications - Medical Preliminary Date - BMI - Body Fat Percentage - Preliminary Nurse Result - Preliminary Nurse Result Date

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
MedPrelim (cont)	2	71,683	Preliminary Medical Exam	• Preliminary Doctor Result • Preliminary Doctor Result Date
MedSpecialist	1	39,675	Specialist Medical Exam	• Candidate Identification • Application Number • Total Number of Applications • Specialist Type • Date Requested • Appointment Date • Status
PFA	1	30,784	PFA	• Candidate Identification • Application Number • Total Number of Applications • PFA Number • Booked Date • Assessment Date • Result
Psych	3	136,710	Aptitude Testing / Psychology Interview	• Candidate Identification • Application Number • Total Number of Applications • Psychology Assessment Date • GAS • TAS • PLT • Training Potential

File Name (cont)	Total Files in Group (cont)	Total Observations in Group (cont)	Recruiting Process / Event encompassed (cont)	Variables Included (cont)
Psych (cont)	3	136,710	Aptitude Testing / Psychology Interview	• Psychology Suitability • Military Suitability

APPENDIX C

DATA VARIABLES USED FOR ANALYSIS

Variable Title	Variable Description
candidate_id	Unique Identification Number (Initial Contact)
application_date	Date of initial contact with DFR (Initial Contact)
gender	Gender (Initial Contact)
age	Age at time of initial contact with DFR (Initial Contact)
jobpref1_title	First Preference Job position (Initial Contact)
jobpref1_service	First Preference Service (Initial Contact)
jobpref1_type	First Preference Type of Service (Initial Contact)
jobpref1_entry	First Preference Avenue of Entry (Initial Contact)
jobpref1_prelim_med_class	First Preference Medical Class after Nurse Examination (Assessment)
jobpref1_med_class	First Preference Medical Class (Assessment)
jobpref1_psych	First Preference Psychology Interview Rating (Assessment)
jobpref1_di	First Preference Defence Interview Rating (Assessment)
jobpref1_osb	First Preference OSB Rating (OSB/FSB)
jobpref1_fsb	First Preference FSB Rating (OSB/FSB)
info_request	Information Only Flag (Initial Contact)
previous_service_flag	Previous Service Flag (Initial Contact)
policecheck_result	Result from AFP Police Check (Enlistment/Appointment)
cit_el	Australian Citizen or Permanent Resident Flag (Initial Contact)
crim_hist	Criminal History or Correctional Center Flag (Initial Contact)
min_year10	Minimum Year 10 Education Flag (Initial Contact)
min_year12	Minimum Year 12 Education Flag (Initial Contact)

Variable Title (cont)	Variable Description (cont)
min_year9	Minimum Year 9 Education Flag (Initial Contact)
firstappeal_cat	Event or Activity of First Appeal or Waiver (JOES/Assessment/OSB)
firstappeal_result	Result of First Appeal or Waiver (JOES/Assessment/OSB)
firstappeal_type	Type of First Appeal or Waiver (JOES/Assessment/OSB)
secondappeal_cat	Event or Activity of Second Appeal or Waiver (JOES/Assessment/OSB)
secondappeal_result	Result of Second Appeal or Waiver (JOES/Assessment/OSB)
secondappeal_type	Type of Second Appeal or Waiver (JOES/Assessment/OSB)
thirdappeal_cat	Event or Activity of Third Appeal or Waiver (JOES/Assessment/OSB)
thirdappeal_result	Result of Third Appeal or Waiver (JOES/Assessment/OSB)
thirdappeal_type	Type of Third Appeal or Waiver (JOES/Assessment/OSB)
dco_interview	DCO Interview Required Flag (Assessment)
dr_interview_result	DR Interview Result (JOES)
med_attest_bmi	BMI at Medical Attestation (Enlistment/Appointment)
med_attest_cp_score	CP Score at Medical Attestation (Enlistment/Appointment)
med_attestation_class	Medical Class at Medical Attestation (Enlistment/Appointment)
fit_for_entry	Fit for Entry Flag (Enlistment/Appointment)
mhq_rejection_reason	MHQ Review Issues (JOES)
mhq_reject_nurse_result	Nurse Decision after MHQ Review (JOES)
mhq_reject_doctor_result	Doctor Decision after MHQ Review (JOES)
prelim_med_date	Date of Nurse Examination (Assessment)
prelim_med_bmi	BMI at Nurse Examination (Assessment)
prelim_med_bodyfat	Body Fat at Nurse Examination (Assessment)

Variable Title (cont)	Variable Description (cont)
prelim_med_cp_score	CP Score at Nurse Examination (Assessment)
prelim_med_nurse_result	Nurse Examination Result (Assessment)
prelim_med_doctor_result	Doctor Examination Result (Assessment)
med_specialist_date_requested	Date of Specialist Examination Request (Assessment)
med_specialist_type	Type of Specialist Examination Request (Assessment)
med_specialist_status	Status of Specialist Examination (Assessment)
firstpfa	First PFA Result (Enlistment/Appointment)
secondpfa	Second PFA Result (Enlistment/Appointment)
thirdpfa	Third PFA Result (Enlistment/Appointment)
fourthpfa	Fourth PFA Result (Enlistment/Appointment)
fifthpfa	Fifth PFA Result (Enlistment/Appointment)
sixthpfa	Sixth PFA Result (Enlistment/Appointment)
seventhpfa	Seventh PFA Result (Enlistment/Appointment)
eigthpfa	Eigth PFA Result (Enlistment/Appointment)
ninthpfa	Ninth PFA Result (Enlistment/Appointment)
tenthpfa	Tenth PFA Result (Enlistment/Appointment)
psych_gas	GAS (JOES)
psych_tas	TAS (JOES)
psych_plt	Pilot Score (JOES)
callcentreenquiry	Contact with DFR Flag (Initial Contact)
jobpreferences	Job Preferences Flag (Initial Contact)
joeinfosessionbooking	JOES / Information Session Booking Flag (JOES)
joesessionattended	JOES Attended Flag (JOES)
assessmentdaybooking	Assessment Booking Flag (Assessment)
defencerecruiterchecklist	DR Checklist Conducted Flag (Assessment)
assessmentoverview	Assessment Overview Completed Flag (Assessment or OSB/FSB)
policecheck	Police Check Completed Flag (Enlistment/Appointment)

Variable Title (cont)	Variable Description (cont)
candidatetotargetallocation	Target Allocation Completed Flag (Enlistment/Appointment)
enlistappointbooking	Enlistment/Appointment Booking Flag (Enlistment/Appointment)
enlistappointattended	Enlistment/Appointment Attended Flag (Enlistment/Appointment)
attestationmedical	Attestation Medical Completed Flag (Enlistment/Appointment)
enlistedappointed	Enlistment/Appointment Completed Flag (Enlistment/Appointment)

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